PERSONNEL

May, 1956

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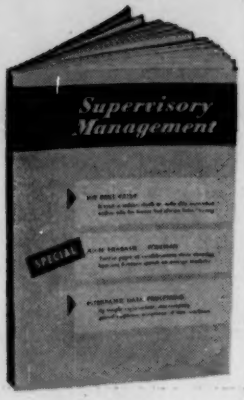
The National Journal of Personnel Management

AMERICAN MANAGEMENT ASSOCIATION



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MAY, 1956

Personnel

The National Journal of Personnel Management

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. . . strictly personnel

Of Time and Top Management

PERSONNEL EXECUTIVES who have "too much to do with too little time," as is reported in one of this issue's feature articles, may draw comfort from the fact that many of their bosses face the same problem—in spades. According to a new AMA survey of top management,* overtime is so prevalent in the higher echelons that, as a company president confessed, "on any top job it does not seem possible to get away from it."

The higher the rank the heavier the overtime: presidents and vice presidents put in longer hours—either in the office or at home—than department heads; and men with general responsibilities average more overtime than those with specific assignments.

Of special interest to personnel workers are the causes cited for misuse of time. Human problems, the same kinds of problems that crop up in relationships between front-line supervisors and *their* supervisors, seem to plague top management as well. About half the responding executives, for example, admit they have failed sufficiently to delegate their responsibilities. Most of the reasons reflect problems of personality or personnel: insufficient staff or staff with insufficient ability or training, plus the executive's own reluctance or inability to let go.

A discussion of time spent at internal meetings and conferences brought out estimates that from one-eighth to one-half of the meeting time is wasted by such obstacles as inadequate leadership, personality difficulties of participants, and climate unfavorable for fruitful discussion.

Queried on the greatest single waste of their time, the executives again overwhelmingly cited human problems. The tendency was to blame others: One president complained of "listening to people take an hour to say what could be said in 10 minutes"; a controller deplored the failure of his assistants to use their initiative; and a vice president said the greatest drain on his time was "the need to compensate for the problems created by antagonistic personnel and insufficiently competent personnel." A few men accepted responsibility for poor organization of their own work and for failings in dealing with subordinates.

Notable was the practically unanimous recognition, by this group at least, of the importance of having employees participate in decisions which affect their jobs. Asked whether some decisions reached at meetings could have been reached as effectively by a single individual, about half the respondents said yes. But, they added spontaneously, group decisions are needed not merely for planning but for communication and support.

In fact, several men said, time spent at meetings saves time later on. One executive uses regularly scheduled meetings with subordinates for discussion of all except emergency problems. Another, a manufacturing vice president, spends one hour a week with his foremen, another with his union committee, discussing problems and

* "How Do You Use Your Working Time?", a survey of selected top executives by the Editorial Department, American Management Association. The findings will be reported fully in THE MANAGEMENT REVIEW.

keeping them informed. These meetings, he says, "save many hours of misunderstanding." To which personnel people might reply: Amen.

Human Relations Training: Does It Really "Take"?

THOUGH FEW MANAGEMENTS seriously expect any "seven-day wonders" to emerge from the typical human relations training course, many such courses have been launched in the belief that they can hardly fail to have some beneficial effect on the behavior of supervisors on the job.

This hope is scarcely borne out, however, by two articles in this issue, both of which stress the fact that human relations training cannot be viewed in a vacuum: It must be considered in the light of the total situation—the conditions under which the supervisor actually works, and the "climate" within the company itself.

The first of these articles, both of which draw on the findings of the Yale Technology Project,* makes the point that the production foreman simply does not have the time to behave according to the book; the second, that it is unrealistic to expect any radical change in a foreman's dealings with his employees as a result of a human relations course if his own boss continues to place prime stress on getting out the job.

Confirmation that these findings are not peculiar to the special operating conditions of the plants in which the Yale studies were carried out comes from another recent research project** conducted by the Personnel Research Board of the Ohio State University in cooperation with the International Harvester Company. This study aimed at determining whether human relations training had any lasting effects on the foreman—how he actually behaved on the job after he returned from the course, how far his attitudes were influenced by the kind of leadership manifested at the levels above him, and what effects the different types of leadership had on the overall efficiency of the enterprise.

A major finding of the study was that, though the foremen who attended the company's central training school had shown an increased understanding of human relations at the end of their two weeks' course, after their return to the plant they were actually less considerate and more authoritarian in their dealings with their employees. Not only was the impact of this particular course purely temporary; the very fact of his having been singled out to take it tended, the authors of the report feel, to make the foreman unduly conscious of his position as a member of management.

The study further found that the foremen were more responsive to the day-to-day climate in which they worked than to any training they may have been given: The foremen who worked for a considerate boss tended to be more considerate themselves, and those who worked for a dictatorial one followed his example. To a considerable extent, the report concludes, specific training in human relations is wasted unless the plant climate is generally favorable.

That human relations training programs often fail to produce the results expected, despite their use of training techniques and devices that have proved highly successful in other fields, is by no means a new discovery. The findings of these particular studies serve primarily to reinforce the conclusions reached by researches in other large organizations—notably Detroit Edison and Procter & Gamble—that

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* Robert H. Guest, "Of Time and the Foreman," p. 478; Frank J. Jasinski, "Human Relations Training: The Missing Link," p. 508.

** Edwin A. Fleishman *et al., Leadership and Supervision in Industry*, Bureau of Educational Research, Ohio State University, Columbus, Ohio, 1955.

no permanent change in the ways people handle their relations with others can be expected unless the training process embraces all the elements that contribute to change. They also underscore the fact that a satisfactory test response at the end of a two weeks' course indicates no more than that the trainee has learned the right answers. Many foreman training projects that have been evaluated on this basis and pronounced "successful" may well have been appraised too soon.

Office "Help Wanted": A Study of Recruiting Practices

TO COMPANIES currently beating the bushes for office help, it may be a consoling thought that the first effects of the postwar baby boom will be felt in the job market by 1959. However, the prospect of a noticeably larger crop of high school graduates three years from now, encouraging though it may be, hardly offers any practical solution to today's problems of clerical recruitment.

Estimates of the current shortage range anywhere from 600,000 to 1,000,000, but whatever the exact figure, it is simply another way of saying that the proportion of young people in relation to the general population is at an all-time low. The number of girls in the 15-19 age group dropped by 800,000 from 1940 to 1950—a decade which saw a rise of 19 million in the total U.S. population!

How is business attempting to beat the squeeze? What methods are companies using to attract applicants—and how do the various sources compare in over-all effectiveness, as well as when measured against such yardsticks as the number of rejects or average cost per employee hired? Some interesting light on these and other questions arising out of the general problem of recruiting and selecting office employees is shed by a nationwide survey conducted in connection with a forthcoming AMA Research report.*

The study covered 320 companies, ranging in size from fewer than 50 employees (11 per cent of the sample) to over 1,000 (17 per cent). Approximately half of these were manufacturing firms, and the remainder were banks, insurance companies, department stores, utilities, and similar large-scale employers of office help.

Asked what was their most satisfactory source of applicants, 30 per cent of the respondents named newspaper advertisement, while 27 per cent replied in favor of employment agencies. Twenty-three per cent considered employment agencies to be their second most productive source, and an equal percentage mentioned referrals. Referrals were most frequently cited as the third most productive source.

However, some interesting modifications of this over-all pattern appeared when the returns were broken down by company size. Of the 99 companies in the sample with over 500 office employees, 32 per cent gave newspapers as their most productive source and 23 per cent named schools. For this group, employment agencies ranked at the bottom of the list. Of the 201 companies with fewer than 500 office employees, 35 per cent checked employment agencies as their most productive source, 30 per cent newspapers, and only 9 per cent mentioned schools. It would seem, therefore, that the "Help Wanted" column is a prime source for companies of all sizes, while the use of employment agencies and school contacts varies with company size. Some cause-and-

* Milton M. Mandell, *Recruiting and Selecting Office Employees: AMA Research Report No. 27.* To be published in July.

effect relationship is evident here, inasmuch as small companies generally lack the staff and resources to cultivate schools on a systematic basis, and large companies have their own personnel departments to do the screening job which is the employment agency's chief stock in trade.

How do the various sources compare in terms of cost per employee hired? For the companies listing schools as their most productive source, the average cost per employee was $133. For companies listing employment agencies, the cost was about $92; for those listing referrals, $85; and for those listing newspapers, $87. In companies that gave unsolicited applications as their most productive source, the cost per employee hired averaged as high as $136.

Nearly 58 per cent of the respondents rejected five or fewer applicants for each employee hired, and about 42 per cent more than five. Companies using employment agencies tended to fall in the under-five group and those using referrals in the over-five.

As might be expected, the average cost per employee hired rose proportionately with the number of rejects. Among 28 companies rejecting 10 or more applicants per hire, the average cost was about $158—almost twice as much as the average cost of $87 to 52 companies rejecting three or fewer applicants per hire. Somewhat surprisingly, however, the presumably more careful screening evidenced in a higher number of rejects did not appear to pay off in reduced turnover figures: The average annual turnover rate for the 149 companies rejecting five or fewer applicants per hire was about 17 per cent, as compared with 19 per cent for the 116 companies reporting more than five rejects per hire.

In general, the study failed to uncover any close relationship between turnover and the amount of money spent on recruitment and selection. It did disclose that 60 per cent of the companies where the office manager did the hiring had turnover rates of 10 per cent or less, as compared with 38 per cent for the total sample. This seeming failure on the part of the personnel department may be open to question, however, since it is only in the larger companies that personnel departments do the hiring; and it could well be argued that the factors resulting in higher turnover are the difficulties associated with bigness and not the decisions of the personnel department.

On the whole, the study's findings point to the fact that the mere volume of applicants produced by a particular recruiting method is a poor criterion of effectiveness, and that much more attention needs to be given to the recruitment process, as well as to selection methods, if better results are to be obtained.

• AMA'S ANNUAL SURVEY of university research in personnel management, labor relations, and labor economics will shortly get under way. The editors would appreciate hearing from university research staffs that may not have participated in earlier surveys but that believe their work would be of interest to PERSONNEL readers. Specifications for participants may be obtained by writing the Editorial Department, AMA, 1515 Broadway, Times Square, New York 36, N. Y.

. . . Exhaustive study—for the most part, far removed from the production floor—has been devoted to formulating the duties and responsibilities of the "good" supervisor. But how does this ideal picture jibe with the realities of the foreman's job?

Of Time and the Foreman

ROBERT H. GUEST

Associate Director, Technology Project
Yale University

"You could dispose of almost all the leadership training courses for supervision in American industry today without anyone knowing the difference."

The author recently made this admittedly sweeping statement over the air with the intention of stirring up some discussion about the most talked-about and least understood member of management—the foreman.

Perhaps it should be added that he was not referring to the content of training sessions or their method of presentation, though there is a temptation to throw a few sharp barbs in this direction as well.[1] Rather, his central point was that the conditions of the supervisor's job are often such that he cannot possibly exercise the qualities of leadership expected of him by management. Before a company engages in an extensive "program" for improving the foreman's human relations abilities, management needs to take a long hard look at the operating problems beyond the foreman's immediate control which lead to human relations frictions, as well as limit the time he has to spend on his essential supervisory duties. By trying to improve the man before we improve the job, we are only putting the cart before the horse.

Some time ago, a plant manager in a large, progressive American company said to us, "You know, I'd like to know what a foreman does, what he *really* does. Our general foremen and superintendents live with him every day. We have our training programs, our performance ratings, our reports on quality, efficiency, and scrap. He has been tested backwards and forwards. We expect him to carry out certain essential functions, but how can we improve his effectiveness

[1] For some thrusts directed at yet another aspect of this problem, see Frank J. Jasinski, "Human Relations Training: The Missing Link," pp. 508-515 of this issue.—Ed.

unless we understand the conditions he has to face?"

Good question. Having conducted over 500 interviews with foremen in different industries during the past few years, we were troubled by it, too. We decided to seek an answer.

The plant we chose for the research project was one in which we were thoroughly familiar, having previously made intensive interview studies of workers and foremen there.[2] It was a modern plant engaged in the final assembly of automobiles. We decided to observe in detail each of 56 production foremen for a full eight-hour day, a task which would require us to be on our feet and observing for 27,000 minutes.

The Method of Observation

Preliminary conversations with the foremen indicated considerable enthusiasm over the idea. On the day before each eight-hour observation, the observer spent approximately three hours in the foreman's immediate work section. During this time the observer, with the foreman's assistance, charted the geography of the section, the work stations, and the work flow. He learned the names of parts, tools and equipment, and identified key people in the service departments and the immediate work group.

Next morning, at the beginning of the work day, the observer began recording on a stenographer's pad each *incident* in which the foreman did something. He noted the minute or the fraction of a minute when the incident began (TIME), what the incident concerned (TOPIC), what action was involved (ACTIVITY), where it happened (PLACE), with whom it took place (CONTACT), and the direction and nature of the interaction (INTERACTION).

At the end of the work day, the pages of notes were reviewed by the observer for clarification. That evening, or the next morning, the chronology of incidents was dictated into a recorder. The record was then sent to a typist together with the layout of operations and the location of the people concerned. This procedure was carried out for all foremen, namely, a three-hour, preliminary, "get-acquainted" period, eight hours of observation and notetaking, one hour of note review, and approximately three to four hours of dictating. The same cycle was repeated for the next foreman on the third day.

As each observation report was typed, it was returned to the foreman in question, who was given several days to look it over and make corrections in nomenclature. After these were discussed with the observer, the corrections were made on a carbon copy. The original was then given back to the foreman who was told that, though he could use it as he saw fit, the carbon copy would remain in our office at Yale for analysis and filing. The typewritten observation reports ranged from 40 to 70 pages each in length. Every incident was coded according to the "dimensions" above and punched on IBM cards.[3]

[2] C. R. Walker and R. H. Guest, *The Man on The Assembly Line*, Harvard University Press, 1952; and C. R. Walker, R. H. Guest, and A. N. Turner, *The Foreman on The Assembly Line*, Harvard University Press, 1956.

[3] For a complete description of method and procedure, see R. H. Guest, "Foremen at Work —An Interim Report on Method," *Human Organization*, Vol. 14, No. 2, 1956.

The reaction of the foremen to their own observation reports is an interesting study in itself. We believe that these reactions have certain practical implications for counseling and training, and experiments have begun already along these lines. Comments most frequently heard were:

¶ I never knew I did so much in the course of a day.

¶ I can see where I am doing a helluva lot of things I shouldn't be doing or shouldn't have to do—and this report got me thinking about things I should be doing and don't do.

¶ My wife has a better appreciation now of what I do!

¶ The people on top ought to see this and maybe they would learn what a foreman is really up against.

A Typical Incident Sequence

In all, we recorded 32,652 behavior incidents. Here is a sample sequence of 14 incidents as actually logged for one foreman, Pat.

Time	*Description*
2:15 p.m.	Pat checks with scheduler S. Looks at hourly report of number of cars coming through body shop.
2:16	Walks over to R (repair man) on pickup line and checks to see if earlier repair trouble was corrected.
2:17	Calls over inspection foreman to show him a hole missing in a piece. Inspection foreman acknowledges he will notify the trim department.
2:19	Pat tells repair man to locate the hole by eye until it comes through all right.
2:19½	Pat has a drink.
2:20	Pat walks over to station 5 and asks his utility man how many men he still has to relieve.
2:20½	Moves along the line—stations 5, 6, 7—checking visually on the quality of work.
2:21	Checks a loose nut on a fixture at station 7. Speaks with operator.
2:22	Man at station 3 calls for materials.
2:22¼	Pat tells man at subassembly bench E to make up more material.
2:23	Walks over to MH (stock man). Tells stock man the line is getting low on hinges. They discuss the number short and agree there is enough for tomorrow.
2:25	Pat walks from MH to station 1 and makes visual inspection of the car body to check on the hole discussed earlier at the pickup line.
2:26	Pat sees foreman from preceding section and tells him about the missing hole.
2:26½	A hand signal from welder W.

These 14 incidents are typical of the minute-by-minute activity of the production foreman. The number of incidents ranged from as low as 237 per foreman to as high as 1,073 for a full day, exclusive of lunch. The average number of incidents was 583, which means that every 48 seconds of the day the foreman was doing something different. Some foremen averaged only 26 seconds per incident while others averaged close to two minutes. This difference is explained in part by the ability of some foremen to allocate their time better than others; but, as will be emphasized throughout this report, a high incident rate was usually due to operational circumstances beyond the foreman's control.

Obviously, these foremen had little idle time. They had to handle many pressing problems in rapid-fire order. They had to "take" constant interruption, to retain many problems in their minds simultaneously, and to juggle priorities for action. Parenthetically, it might be suggested that, in setting up criteria for the selection of foremen, management should give

Average Amounts of Time Spent by Foremen on Each Topic

Topic	Per Cent of Time	Topic	Per Cent of Time
Quality	18.2	Production schedule	5.2
Work progress	13.2	Grievances	2.0
Personnel administration	11.2	Injury, illness	1.2
Personal relations and other non-job related topics	10.2	Housekeeping	.5
Foreman performance of an operation	8.1	Work standards	.4
Tools, jigs, and fixtures	8.1	Safety	.2
Materials	8.0	Meeting	.1
Employee job performance	7.6	Miscellaneous	2.4
		Topic unknown	2.4

as much consideration to a man's psychological ability to face up to these conditions as it does to other qualifications, such as technical know-how and "human relations." Interestingly enough, the characteristics of a foreman's job—interruption, variety, discontinuity—are diametrically opposed to those of most hourly operator jobs, which are highly rationalized, repetitive, uninterrupted, and subject to the steady, unvarying rhythm of the moving conveyer. Yet foremen are usually drawn from the hourly ranks.

Topics

The incidents were classified under 15 topics, and the observations coded accordingly. The topics and the average percentage of time spent by the foremen on each of them are shown in the accompanying table.

In itself, this table is meaningful primarily to those engaged in automobile assembly-line operations. Of general significance, however, were the extraordinary variations that were observed between different foremen and on different days, in the allocation of their time. Some spent as much as 21 per cent, or an hour and a half, on a single topic like *Materials* while others spent less than five minutes on it. Some were tied up for two hours on a tool problem while others were involved for only a few minutes. While a number of foremen did not perform any work of hourly operators, one man spent 51 per cent of his time doing nothing but manual work. As we examined the record it became obvious that an inordinate amount of time spent on any one topic measurably diminished the amount of time available for other items in the topic profile. We also discovered that the first item to suffer was *Personal relations*, generally regarded by personnel-minded people as an important function of a foreman's job.

What can be said about differences between the better foremen, as previously rated by management, and the poorer-rated foremen? There was some indication that the latter group were busier; that is, they had a higher number of incidents. They also tended

to spend more time doing manual work. But the general conclusion we reached was that the profile of time distribution is only a partial reflection of a man's ability, experience, or training. Equally important are the unpredictable operational factors, the things a foreman must face, minute by minute, which dictate how he allocates his time. Even the "best" foreman, when faced with absenteeism, mechanical problems, new operators, schedule changes or material shortages, had to devote large segments of his time to this particular problem on a given day and at the expense of other important supervisory duties. The best selection and training techniques can hardly be expected to pay off, if the conditions of the job make it impossible for a foreman to discharge at all times the full scope of his responsibilities.

Activities

The 13 categories included in this dimension, and the average amounts of time devoted to each, are shown in the following breakdown:

Activity	*Per Cent of Time*
Talks	46.6
Looks	20.9
Manipulates	9.6
Walks	6.9
Hands, Carries	5.6
Reads	2.9
Telephones	2.4
Writes	2.1
Stands	1.0
Signals	.8
Listens	.6
Shows	.4
Sits	.2
Total	100.0

As may be seen, the activity these foremen engaged in least was *Sits*, less than one minute during the entire day! Most foremen *Walked* at least four miles every day and some as much as six. Two categories, *Manipulates* and *Carries*, took up more than 70 minutes a day on the average. On the other hand, the activity *Shows*, involving some kind of operator instruction with demonstration by the foreman, took up less than two minutes of the entire day. For those who place importance on the foreman's role as an instructor, this finding may come as a surprise. But, here again, careful examination of the detailed observations revealed scores of interrupting priorities which precluded his performing this essential function.

Contacts

As the following breakdown shows, the average foreman was in face-to-face contact with some other person 57.3 per cent[4] of the time:

Contact	*Per Cent of Time*
Own Operators	26.4
Other Foremen	7.0
General Foreman	4.6
Department Superintendent	1.1
Other Superiors	.4
Service Personnel	
Maintenance	2.5
Inspection	2.3
Material	2.6
Work Standards	.4
Other Operators	3.8
All Others	6.2
Total Contact	57.3

This finding underscores the importance of a foreman's "social" skills

[4] The percentage of time spent on Contacts was higher than the percentage spent on *Talks* shown in the Activity breakdown because Contacts included activities where no verbal interaction was involved.

on the job. Most of his contacts, however, were short and usually interrupted. More often than not, a discussion between a foreman and someone else was cut short because a new emergency arose. As one man put it, "This job is just one damned emergency after another." Discontinuity and interruption, the characteristics of the foreman's contacts with others, can be traced to the compelling demand to keep the line moving and to take care of any immediate difficulty which might upset the work flow.

The average foreman talked with many different individuals, rarely fewer than 25 and often more than 50. He dealt with a wide variety of persons in the operating and service departments and on different levels. In terms of sheer numbers, it would seem that the foreman is probably in contact with more people in the course of a day than anyone else in the management organization.

As might be expected, foremen talked more with their own operators than with any other single group in the organization. Nevertheless, it was found that the average foreman spent *less* than five minutes per man per day. Many foremen had to spend long periods of time in contact with one or two operators to the virtual exclusion of the rest.

Curiously enough, when comparisons were made between contacts with subordinates and contacts with all others, the foreman spent less time with his own men than he did with others. Most of the leadership or human relations training we hear about focuses almost exclusively on foreman-worker relationships. What about relationships with inspectors, maintenance personnel, other foremen? And what about the boss? This study showed more contacts between a foreman and his general foreman than with any other individual.

Only passing comment can be made here on the last two dimensions of behavior — PLACE and INTERACTION. Foremen spent 14 per cent of their time *outside* their own sections. As regards INTERACTION, a category of theoretical research value, it was found that 60.3 per cent of the contacts were initiated by foremen and 37.7 per cent were initiated by someone else to the foremen.

In summing up this oversimplified description of observed facts it should be made clear that the behavior of these particular foremen is not presumed to be typical of foremen in general. The emphasis should not be on the substantive results. Rather it is hoped that the study, taken as a whole, will stimulate managements to take a second look at the nature of the job—*any* foreman's job—and the basic conditions which circumscribe it.

Applying the Observation Technique

Skillfully used, the observation technique can serve many purposes. Admittedly, this pilot experiment was done the hard way. The time spent on observing, recording, typing, coding, and punching and running off simple summaries totaled almost 1,700 hours, a discouragingly lengthy process. It is quite possible to use a more simplified sampling and recording procedure and so cut the time by 80 per cent. Also, the job does not have to be done by an outside research group. It can be implemented by members of the personnel staff or by industrial en-

gineering, if the organizational climate is such that good rapport between these groups and the foremen has existed for a long time. But, even if conducted by members of these staffs under ideal conditions, the purpose of the observation must be made absolutely and honestly clear to the people being observed.

In this writer's judgment, the best way to carry out such a study is to select one of the more intelligent and respected members of the foreman's group itself and place him on special assignment for the job. One company is considering doing this. The advantage is obvious. He is considered by foremen as "one of our own people." His word that the observations will be held in confidence will be respected. He should explain that the results will be shown to others only by permission of the foreman observed. Our experience indicates that the foreman is glad to have others understand the problems he faces. Another advantage of using a special assignment foreman is that his presence is less likely to arouse suspicion. And, as indicated above, it is not necessary to "bird dog" the foreman for a full day. Random observations of 20 minutes made at different times and on different days can be carried out without making the observed foreman feel conspicuous.

Uses of the Findings

As was previously pointed out, the written observations can be extremely helpful to the foremen themselves. It is rare that a foreman has the opportunity of obtaining an objective picture of himself at work. Further, the observations can serve as a guide for sympathetic and understanding superiors. However, they should *never* be used as a substitute for performance ratings. Once a foreman knows that an observation may possibly be used against him, he can hardly be expected to cooperate in the future.

Training directors may also find the observations useful as case material when used anonymously. It is relatively simple to extrapolate from a report a whole sequence of incidents relating to a particular problem, say the handling of a grievance, and use the data as a kick-off for discussion. Likewise, the personnel manager can utilize the material to bring to the attention of top management critical problems in the personnel sphere that are in need of correction.

However, the most important use to which the information can be put is to bring home to operating people the fact that operational bottlenecks and difficulties not only hurt production as such, but they also affect the foreman's ability to plan ahead and avoid future difficulties.

Foremen are always getting caught in this familiar vicious circle. Material inspection, say, has failed to spot some faulty pieces. Something goes wrong at a welding operation. The general foreman is on the foreman's neck to "get it straightened out, or else!" The foreman drops everything to spend time on this one item. He cannot pay attention to the man he was breaking in on a new job. He cannot check on the stock bin which the stock man forgot to replenish. He meant to warn an operator about a safety condition. He knew another man was down in the dumps about a personal problem. By the time he has cleared up the original trouble and

satisfied the boss, something else has blown up and the general foreman is roaring down the aisle again.

Here is a specific example of the practical use of the observation in spotting a condition requiring correction. No one would dispute the fact that when a foreman has to perform manual work for long periods of time he is obviously not supervising. In examining the observation reports in detail it was discovered that nine foremen, all in one department, averaged over two hours apiece doing manual labor. As someone quipped, "Those guys are supposed to pack eight hours of supervision into six hours' time."

In this instance, management was not wholly aware of the condition. At all events, its consequences were not fully appreciated. The observations revealed the source of the trouble—a serious shortage of manpower. On a moving assembly line, every operation must be manned all the time by qualified operators. In this case, the effort to reduce labor costs to a minimum had gone too far and adequate replacements were not available to cover for absentees. So these foremen ended up by spending much of their time doing work which drastically cut in on their other duties. As it turned out, management now fully recognizes the problem and is taking measures to correct it.

Numerous other practical illustrations could be cited. For example, observations were made on a small scale in one department of a large precision-machinery plant. Here, the foreman was spending large amounts of time working out job-lot schedules and handing out job assignments, and spending very little time on the human relations phase of his job. He was acting more like a clerk and messenger boy than a supervisor. Following our report and analysis, a real effort was made to revise the basic system of production control. The change had a marked effect on the foreman's behavior and attitude. He was able to spend more time helping and instructing his men. The change helped production, but what was even more important, certain members of upper management came to new conclusions about the company's responsibilities to foremen. Now the company realizes that its first duty is to look at the problems a foreman has to face, then attack those areas which make it difficult or impossible for him to do an effective job. Once these bottlenecks are eliminated, management can concentrate on the foreman as a *person*. Leadership training and guidance from superiors can be useful because he has *time* to apply his training. Responsibility for the performance of men and machines can then be placed squarely on the foreman's shoulders, where it belongs.

Conclusions

What clearly emerges from these detailed observations of the foreman's job is that there is considerable difference between what a foreman *should* do and what he *can* do. A foreman who has to jump from one operating emergency to another every 45 seconds has neither the time nor the inclination to practice the fine precepts he is exposed to in human relations training programs. Indeed, such training may only serve to compound his own frustrations.

The problem a foreman faces might be compared to that of a doctor in a community blighted by disease, epidemics, and poor sanitary conditions. However expertly he may have been trained in the treatment of disease, his effectiveness is measurably limited so long as he can take care only of individual emergency cases. The cause must be eliminated through a more intelligent public health program.

So it is with the foreman. The disease, if we may call it that, is poor human relations stemming from the built-in frictions caused by operating emergencies. What is called for, first, is a reduction of these potential sources of conflict which so often are caused by conditions beyond the foreman's control. This is the essential responsibility of *line* management. But the personnel manager and his staff can bring many of these conditions to the attention of operating people by using the observation tool described here. More important, when operating conditions give foremen that treasured commodity, *Time*, then the work of the personnel and training staffs can begin to pay off.

White-Collar Personnel Practices—A Survey

WHAT PERSONNEL policies and practices are applied to the average office worker? According to a survey of 120 companies, large and small, recently carried out by the Bureau of National Affairs, the treatment accorded the white-collar employee compares favorably with that meted out to production personnel.

Salary ranges, the study finds, are typically set by job evaluation and pay raises are established through a formal merit-rating plan. In addition, the office worker receives automatic raises matching those given to shop employees. She works a 40-hour, 5-day week, with time and one-half for overtime, and premium pay for working on a holiday.

The average office worker does not have to punch a time clock and loses no pay on account of tardiness. She has two daily rest periods, enjoys a more flexible vacation plan than shop workers, and gets six paid holidays a year. In addition to receiving employer-paid group life insurance, she is covered by accidental death and dismemberment insurance, and surgical, hospital, medical, and sickness and accident benefits. She is also entitled to paid sick leave.

Among other privileges, the office worker often gets special parking facilities, as well as time off with pay for personal matters, and generally enjoys better working conditions than shop employees.

. . . Despite the frustrations that seem to be common to most personnel jobs, personnel executives, by and large, are not looking for greener pastures but are finding sufficient challenge and opportunity in their chosen field.

The Personnel Man and His Job

An AMA Survey

EDITH LYNCH

Assistant Manager, AMA Personnel Division

IF THERE WERE such a person as the average personnel man, he would be a little over 42 years old. He would have been working for 20 years, of which he would have spent almost 10 in the personnel and labor relations field. He would work in a plant of approximately 800 employees and directly supervise 10 other employees. His earnings would be a little over $10,000 a year. He would spend many hours outside his office either on work directly related to his job or in community relations indirectly related to it. He would probably have had four years of college. Though many years out of school, he would still be eager to learn and spend hours in professional reading and study. He would probably deplore the fact that his programs have not been wholeheartedly accepted by top management and line personnel. He would not have started out as a personnel man, but would be likely to have come from production or general management. Despite all his trials and tribulations, he would be planning to stay in personnel work.

Such is the profile that emerged from a study of the participants at AMA's Midwinter Personnel Conference. Of the 1,830 conferees, 450 completed a questionnaire designed to explore the personal facts about personnel men—their ages, salaries, and educational backgrounds, the fields they worked in before assuming their present positions, their major frustrations on the job, and their ultimate work goals. The respondents' replies to these and other questions have turned up a number of facts which should be of interest to personnel executives generally.

The over-all age distribution of the respondents to the questionnaire is

shown in the following breakdown:

Age Bracket	*Number*
25-30	41
31-35	57
36-40	90
41-45	88
46-50	75
51-55	49
56-60	19
Over 60	4
Total	423*

The average ages by major position titles were: Vice Presidents or Assistants to the President, 52.5 years; Industrial Relations Directors or Managers, 45.3 years; Personnel Directors or Managers, 42.8 years; Management Development Directors, 42.5 years; Labor Relations Directors, 40.8 years; Employee Relations Directors, 40.2 years; Directors of Personnel (or Industrial) *and* Public Relations, 40 years; Training Directors, 38.6 years; Employment Managers, 38.1 years; Assistant Personnel Directors or Managers, 37 years; and Wage and Salary Administrators, 36.4 years. The average age of the total sample was 42 years.

On the average, the respondents have been working for 19.2 years, of which 10.8 have been spent in actual personnel work. Those under 35 tend to have had almost as many years' service in the personnel field as those over 50 who may have been working twice as long.

The average plant represented by the executives attending the AMA meeting employed 800 people, although plant size ranged from 250 to 230,000 employees. The majority were employed in companies having between 500 and 1,500 workers.

* 27 returns were excluded from the tabulation because they did not fall into the personnel field.

Frustrations of the Personnel Job

All but 60 of the 423 respondents whose replies were tabulated said that their top industrial relations or personnel men reported to the company's top executive. Taken at its face value, this statement might well be construed as implying that the personnel department has the full blessing of top management. However, closer examination of the returns discloses rather the reverse—a major item on the debit side of the personnel man's job. And this is far from being his sole complaint—the survey revealed a dozen major gripes. Some were peculiar to the individual's job but others crisscrossed through the whole structure of the study.

1. Lack of top management support has the doubtful honor of heading the list. This is found at every level of the personnel field. A vice president said, "There is lack of complete top management understanding, approval, and backing in the majority of instances. They give lip service approval but when it comes right down to cases (or budgets) personnel isn't given equal status or consideration with line departments, or accounting. It shouldn't be necessary to be constantly 'selling' the fact it's doing a responsible and worth-while job."

An industrial relations director put it this way: "It takes a lot more selling to top management for training programs or additional personnel to run their programs than for the production people to get a $5 million building yearly."

An apparently widely held opinion was summed up by one personnel director in these words: "We are dealing with one of the most important facets of a business—people—people who push the switch. Yet, generally, and on an average, our salaries are below those in sales, purchasing, etc. Something should be done to convince management of our value."

An assistant in the industrial relations department said, "There is failure of top management to heed the advice of personnel people except when an emergency arises, and as a consequence there is understaffing of the personnel department and inability to secure top-level policy decisions in time to avert emergencies."

2. Second-ranking frustration is the lack of cooperation of line personnel with the personnel department. While this, of course, is a characteristic of many staff jobs, it seems to plague personnel directors and industrial relations directors especially. As one personnel manager expressed it, "Too often the personnel department is circumvented. Department heads take over the functions of personnel, particularly in the hiring and quoting of salaries, and frequently in the dismissal of employees without consulting personnel." Said an industrial relations man: "Production people give only lip service to the basic principles of human relations which the industrial relations people are expected to develop and foster."

3. Somewhat along the same lines is the complaint that there are too many so-called personnel experts in departments other than personnel. In the words of one personnel director, "The job lacks prestige because everyone from the janitor to the president of the company figures he is an expert in your field—but only you take the rap for composite bad guesses."

4. A toss-up for fourth place goes to a weakness inherent in the job itself—that of being unable to measure results in concrete terms. One respondent wrote: "There is failure to get recognition because personnel actually does not contribute directly to profits, as do sales, production, and investing." Many confined themselves to stating the bare facts: "The job is frustrating because there are no tangible measurements."

5. Lack of long-range planning worries many personnel executives, especially those in the upper echelons. There is "difficulty in getting the management group to recognize the importance of personnel functions and the necessity for continuing a long-range program if effective results are to be obtained."

Labor relations men, also, list this gripe toward the top of the list, with special reference to the bargains made through backdoor interference by top management without thought of future pitfalls, or, as one of them put it, "The lack of clear-cut management policy within which to operate. The tendency of management to want to follow the 'pattern' of the area or industry rather than pioneer in personnel administration the same as they do in other fields."

6. Linked closely with this complaint is another that, while found among many personnel people, is at the top of the list so far as labor relations people are concerned—management support only in moments of

crisis and neglect at other times. In the wry words of one industrial relations man, "There is a standard lack of status except when in the critical function of 'bailing out' some other management element. Badge of office should be a bucket."

Some Personal Frustrations

7. A personal frustration is the lack of security in the job. This fear cuts across almost the entire personnel field with the exception of the vice presidents. That it affects comparatively high-salaried personnel was shown in one reply, "Fear of getting fired because in time of economic adversity the personnel department is the first to be eliminated." Or, as a comparatively young man of 41 who plans to stay in the field said, "The dealing in intangibles results in insecurity. It is difficult to get a new position if over 50, as opposed to other positions."

In this respect, labor relations people are in double jeopardy. As one labor relations director pointed out: "There is a certain degree of insecurity; can be caught in the squeeze between management and labor unions. Tendency to blame difficulties between management and labor on personnel man even though the actual difficulties arise through other top management."

8. The next major complaint is slow promotions. The vice president claims he has nowhere to advance to; a public and industrial relations director bewails the fact that he can never go higher than a vice presidency; and the assistants in the lower salary brackets say that promotion is too slow. It is rather significant, however, to find that these complaints tended to appear low down in the list of the individual respondent's gripes.

9. The next complaint is probably not peculiar to the personnel department. Regardless of the field, the current cry seems to be, "Too much to do with too little time." Personnel people throw in the extra complaint, "Too little staff to perform multitude of jobs." Here and there respondents also mentioned that their facilities were inadequate.

10. Salaries are comparatively low. Usually this complaint is tied to the heavy workload carried by personnel people.

11. Other complaints were lack of communication with others, resulting in a lack of understanding by all management as to the complexities of the job; not letting personnel in on planning projects that affect them; and failing to get a pat on the back when the job is well done.

While the complaints seem numerous, there were a handful of respondents who said that they love personnel work or, "We gripe, but we love our jobs." Several remarked, that they thought times were "getting better for personnel," or "There has been progress," or, finally, "Whatever gripes I am reporting refer to the other fellow; my own situation is now wonderful."

It is interesting, too, that the majority of frustrations reported do not stem from the usual sources of complaint on other jobs, such as low pay, slow promotion, or too much to do. The intangible frustrations—lack of support, lack of understanding, ina-

bility to sell importance of the job—rank far ahead of the more easily measured complaints.

Overtime

A major finding of the survey was that overtime seems to go almost automatically with any position in the personnel field. The basic work week reported was usually 40 hours. Several respondents reported a 37½-hour and a slightly smaller number a 35-hour week. Forty-four hours represented the basic work week in a little over 20 companies, and a few reported hours up to 48 and 50.

The average amount of overtime reported per month ranged from 20 to 30 hours, although about 35 respondents reported over 100 hours of overtime per month. That would make the work week closer to 60 or 65 hours rather than the 40 hours scheduled.

Overtime is especially heavy in the industrial relations field, where much outside time must be spent in preparation for and actual negotiation, as well as in traveling. One industrial relations man says, however, that he realized that this provision was inherent in the job when he took it and he is not dissatisfied. "Working time is apt to double during negotiations," according to one respondent.

Much of the overtime of personnel directors or managers is spent in preparing reports, community relations, and serving as a company representative on outside committees. Many of them reported that they found it impossible to estimate how much overtime they put in. One was honest enough to admit that overtime hours have a way of seeming much longer than regular ones. As he put it, "30, as nearly as I can estimate—but it seems like 300."

Training and management development directors are apt to spend time away from the job in teaching college classes but they, too, spend a great deal of outside time in working on reports and reading.

Vice presidents report between 20 and 60 hours' overtime per month, with most of them saying that they put in as much time as the situation demands.

Among the long list of duties performed on overtime the most frequently mentioned were: attending meetings, traveling, preparation for negotiations, preparation of reports, community activities related to the job, recruiting, public relations negotiations, and catching up on mail, professional reading, and paperwork.

Ultimate Job Goals

Despite the plethora of complaints about the personnel job, nine out of every 10 respondents said that they intend to remain in the personnel field. Practically all the labor relations and industrial relations people plan to stay in their chosen field, and the few who want or plan to leave have set general management as their ultimate goal. Only 11 personnel directors or managers have set their sights elsewhere. They indicated sales, management consulting, plant management, or industrial or personnel relations combined with public relations as the fields they would like to enter. One personnel manager said that he plans to leave the personnel field eventually because he is still looking for that elusive "easy job." Training

TABLE I

Where Respondents Worked Before Entering the Personnel Field

Previous Fields	Present Positions								
	Over-all Sample	*Vice Presidents*	*Personnel Managers or Directors*	*Industrial Relations Directors*	*Labor Relations Directors*	*Training or Management Development Directors*	*Assistant Personnel Managers or Directors*	*Assistant Industrial Relations Directors*	*Wage and Salary Administrators*
Office Management	26	1	9	3	3	3	1	1	
Finance	17	1	4	4					
Sales	22	2	8	3		1	1	1	
Engineering	29	1	9	5	3	3			1
Production Management	68	5	24	15					1
General Management or Administration	47	2	18	8	2	2	1	1	1
Directly from School	86	1	26	15	1	7			1
Other	153	5	36	26	6	7	2	2	2
*Total**	448	18	134	79	15	23	5	5	6

* Totals are larger than in other tables because many respondents had worked in more than one field before entering personnel.

directors hope to move into the field of management development, and some of the younger assistants have picked sales for their goals.

All in all, personnel and industrial relations would seem to offer enough of a challenge to retain most of those who enter these fields. It is of interest, however, to find that comparatively few present-day "operators" started out in personnel work. A detailed breakdown of the various fields in which the respondents worked before assuming their present responsibilities is shown in Table 1.

As may be seen, comparatively few entered the personnel field directly from school, and of these the majority went into straight personnel or training work. Nevertheless, it is somewhat surprising to find that, of the industrial relations directors reporting, about one-fifth also came into the field straight from school. Most of these, however, were under 40; the industrial relations directors above that age usually came from general management or production. Education and law were stepping stones for many other industrial relations men. Vice presidents seem to have come primarily from production management.

Younger personnel workers, too, are more apt to have entered the field straight from school than those over 40. Education, law, government, military service (again among the younger group), accounting, counseling, social service, safety, the ministry, psychiatry, newspaper reporting, plant security, and even football are among the other fields listed.

About half a dozen respondents reported that they had served on the other side of the bargaining table as union officers. Twenty-five had advanced from factory or plant jobs, up through foremen or supervisors, and ultimately into personnel.

Personnel Salaries

How much do personnel executives earn? Information on salaries is probably one of the most sought-after and elusive facts in any professional field. Since there were certain time and space limitations and since AMA was not primarily interested in this question, no attempt was made to obtain specific salaries which could be correlated with detailed position descriptions. The distribution of salaries by broad salary ranges for certain well-known positions is given in Table 2. The positions listed include only those for which there were a sufficient number of returns, so that individual positions and company data would not be revealed. In addition to the 27 questionnaires that were not included in the tabulation, 19 returns did not disclose any salary information. The total shown in the table is therefore less than in other sections of the survey.

It will be noted that almost 60 per cent of the respondents are earning over $10,000 a year. The aristocrats are naturally the vice presidents or the assistants to presidents in charge of personnel or industrial relations. Ten of the 13 respondents in this category earned more than $20,000 a year. While three of the men in this classification were in their forties, nine were in their fifties. Somewhat surprisingly, only one was in his early sixties. Although maturity in years would seem to be one of the bases for responsibility and high salary, the

TABLE 2

Salaries of 404 Personnel Executives

POSITION	SALARY RANGE						
	Under $5,000	$5,000 to $7,500	$7,501 to $10,000	$10,001 to $15,000	$15,001 to $20,000	Over $20,000	Total
Vice Presidents of Personnel or Industrial Relations and Assistants to the President				1	3	9	13
Directors of Industrial or Personnel and Public Relations			3	1	2	1*	7
Industrial Relations Directors or Managers			13	36	16	8	73
Assistant Directors or Managers of Industrial Relations		1	1	3		1	6
Plant and Divisional Industrial Relations Directors		1	4	1	1		7
Assistants to Industrial Relations Directors		2	2	3			7
Labor Relations Directors or Managers			3	6	3		12
Assistant Labor Relations Directors		1		1			2
Personnel Managers and Directors	1	20	31	46	12	7	117
Personnel Supervisors		4	6	4	1		15
Regional Personnel Directors			2	7			9
Plant Personnel Directors		1	2	1			4
Assistant Personnel Managers or Directors		6	7	4			17
Employee Relations Directors			5	12	1		18
Wage and Salary Administrators		2	1	2			5
Management Development Directors			2	2			4
Training Directors or Superintendents of Training		2	1	3	1		7
Employment Managers		2	2	2			6
Miscellaneous Personnel Jobs		13	23	21	13	4	75
Totals	2	55	108	156	53	30	404

* Vice President of Personnel and Community Relations.

top men in the personnel field are still comparatively on the young side.

Next highest paid are industrial relations directors or managers. The responsibility of negotiating contracts, which usually falls within the industrial relations province, entails handling a large proportion of production costs. An error in negotiation on the part of the industrial relations director would cause his company as serious a loss as any likely to be encountered in production. If the industrial relations director is also responsible for other personnel functions his position becomes doubly important. As might be expected, the salaries in the $7,501 to $10,000 bracket were usually found in plants with less than 1,000 employees.

The survey also yielded evidence of a growing trend to combine personnel and industrial relations with public relations. One vice president in this category reported earning over $20,000 per year. The earnings of the other six ranged from the $7,501-$10,000 to the $15,001-$20,000 mark. Despite the double chores involved, this position did not seem to be too onerous for the shoulders of fairly young personnel. All the respondents in this group, with the exception of the slightly older vice president were under 45. Half of them, a better than average proportion, came directly into the personnel field from school.

Another personnel position that is fairly new—management development director—exhibited some of the same characteristics. Though the salaries of the four respondents do not range quite so high, the youngest member of the group reported that he came to his job directly from a university staff. Three have Ph.D.'s and the fourth has 75 per cent of his doctorate completed. While this sample is too limited to warrant any general conclusions, it is interesting to note the high educational level of the men holding these particular positions.

Salary ranges of labor relations managers and employee relations directors are almost the same as for industrial relations directors with the majority earning more than $10,000. The widest range—from under $5,000 to over $20,000—is seen among personnel managers and directors, possibly because this title covers a correspondingly wide range in plant size, age, number of people directly supervised, number of years on the job, and educational background. On the whole, and as might be expected, the lower pay scales were found in the smaller plants and among the younger personnel, though the various combinations of the two factors of plant size and age led to deviations from this general rule. For example, one personnel manager of 30 in a plant of 6,000 was making between $10,001 and $15,000, while another aged 63, employed in a plant with slightly over 1,000 workers, was in the $7,501-$10,000 bracket.

It is of interest to note that only two respondents reported earning less than $5,000. However, there may have been some reluctance on the part of those in the lower salary brackets to complete the questionnaire.

Educational Background

A college degree, if not two, now seems to be taken almost for granted in the personnel field; but the survey shows that it does not necessarily

apply to all the people who are working in personnel and industrial relations at the present time. There were 368 degrees, an imposing total, among the 423 returns, but 40 of these were advanced degrees, leaving 95 respondents, or about 20 per cent, who did not have any college degrees. Many of these have had one or two years of college or are taking courses at the present time. Four years of high school were reported by the older industrial relations and personnel directors and three vice presidents. Evidently, to get to the top without the benefit of a college degree is not impossible, and though education helps in advancement, the value of actual experience in the field should not be underrated.

Among the 368 degrees there were only 27 in industrial relations or personnel. The others ranged from a Ph.D. in chemistry to an A.B. in criminology. There were several LL.B.'s and Ph.B.'s in journalism and sociology, and numerous degrees in chemical and mechanical engineering. Economics, business administration, education, law, and psychology seem to be the most popular collegiate fields that lead to personnel or industrial relations work.

Further Training

Labor law, psychology, human relations, general management, and applied psychology are the most popular courses that personnel people would like to take if they had the time, money, and opportunity to do so, the survey showed. At all levels, there was a manifest eagerness on the part of the respondents to learn more, to broaden their views, and to become more proficient in their chosen field. The list of areas in which further training would be taken, if provided, spans a wide range. Among the courses personnel people would like to take are: finance, management development, communications, accounting, statistics, logic, group dynamics, psychological testing, public speaking, engineering, industrial psychiatry, counseling, rapid reading, cost procedures, safety, wage and salary administration, general management, and advertising.

The majority, it will be noted, are closely related to the business at hand. One lone man wants to take up music and painting (anything to get away from shop problems). A few others would like to take up electronics, metallurgy, or science, which may or may not tie in with their particular industries.

Conclusion

The survey had certain limitations that should, perhaps, be pointed out. First of all, it is possible that the sample may be biased somewhat upwards, since AMA conferences ordinarily attract the more progressive companies. No job descriptions were furnished with the questionnaires, and hence the tabulation has been based on job titles only. However, many of these titles are so firmly entrenched now that this may not be too serious a fault. Had job descriptions been available, the tabulations might have been broken down still further. Where there was some doubt as to the actual position classification, the replies were grouped under the general heading, "other personnel work." In other words, the title "personnel managers and personnel directors" means ex-

actly what it says. It does not include, for example, personnel superintendents, though an examination of job duties, could this have been possible, might have warranted placing all three in the same category.

Finally, it should be said that the picture presented by the survey may be somewhat more gloomy than it actually is in real life. Perhaps the questionnaire should have explored the things that personnel people like about their jobs as well as their gripes.

. . . Casting a somewhat skeptical eye on the numerous techniques that have been devised to make training palatable to managers, the author here restates the case for a classic method of instruction that still scores high in acceptability to the mature "student."

The Lecture as a Management Training Technique

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AS ITS TITLE implies, this paper is an attempt to evaluate the lecture as a tool of management development.

Though such evaluations are usually made by measuring the technique in question against several others, the soundness of this approach seems open to question. For, in following it, aren't we—at least to some degree—like the carpenter who, upon finding that he has to saw several boards of the same length, measures one with his rule, uses it as a measure for the next, and then uses the second board to measure the third, the third to measure the fourth, and so on? Knowing that by the time the third board is reached his standard is lost, the experienced carpenter doesn't do this. Yet our measuring of technique

NOTE: This article has been adapted from a paper originally presented by the author at a meeting of the Production Division of the American Petroleum Institute.

against technique appears to hazard the same possibility of compounding error.

Hence, in trying to make a proper evaluation of the lecture as a training technique, I should like to suggest that we measure it in the light of its ability to contribute to the attainment of the basic objective of management development.

But here we begin to encounter some difficulty. What is that objective? There seems to be a great deal of uncertainty about just what is expected of management development, or indeed, just what the term means in the first place. Undoubtedly, it means different things in different organizations and to different people. Further, management development programs seem to be set up for widely varying reasons. There appear to be as many opinions on these two points as there are writers on the subject.

Perhaps it would be as well, therefore, to begin by making certain fairly obvious assumptions. First, let us assume that the term management development embraces the development of each member of the management hierarchy from the lowest foreman to the highest executive officer.

With the realization that today's manager is not also the owner of the business, as was once the case, but is himself an employee doing a managing job for those who do own it—a job whose difficulties are compounded by the almost unbelievable complexity introduced by governmental regulations, scientific progress, and sheer size —let us next assume that management no longer involves the practice of a simple skill but has rather quietly evolved into a full-blown profession.

Thus we can finally assume that a fundamental objective of management development—if not *the* objective—is to imbue the manager with a professional concept of his job and then help him to develop and upgrade his professional proficiency.

The Nature of Professionalism

What then constitutes a profession? What are its distinguishing characteristics? This is a question that is hard to answer and herein, no doubt, lies much of our difficulty. The term denotes intellectual capacity as contrasted with physical adroitness. The practitioner of a skill or a trade is thought of as applying fixed procedures to identically recurring situations. The professional develops procedures to fit constantly changing situations that never quite duplicate themselves. The professional must possess an intellectual understanding of a vast body of theoretical knowledge which will permit the development of individual solutions to complex problems, as distinguished from the fitting of fixed procedures to anticipated situations.

Professional people are not doctrinaire. They do not jealously clutch to their breasts a prized collection of personal prejudices. Instead, they acquire the mental capacity to look at all aspects of a problem, and the objectivity to appreciate the emotional reaction of each of several points of view.

Important in any profession is the possession of keen analytical ability—the ability to see matters in their proper perspective, to comprehend the relative significance of facts and conditions, and to reach intelligent decisions accordingly.

Closely associated with the professional concept is the observance of a professional code of ethics. This lets the layman know where he stands in his relationship with the professional. For it is a guarantee of a high level of moral conduct, of honesty, sincerity, and fair play.

Acquisition of a professional management attitude very often involves the development of a different outlook on life, of a new way of feeling and thinking. If it becomes a kind of synthetic overlay, rather than a true expression of the man himself, if it is a coat that he puts on in the morning and removes in the afternoon, it is likely to be uncomfortable and frustrating to the individual himself, and artificial, unconvincing, and suspect to his associates. No person can assume with much faith or conviction a role that is incompatible with his true character. Not infrequently, this requires the changing of habit patterns that have been deeply ingrained by years of experience in unseasonable climates.

Here, then, is at least the outline of the transition a man must make if he is to pursue with success a career in industrial management. Here, too, is the cornerstone of any plan of management development. Its primary objective must be to help managers acquire a professional attitude and professional competence. And here is the context in which the tools and techniques of management development must be viewed if accurate evaluations are to be made. The value of a technique bears a direct ratio to the degree to which it contributes to the accomplishment of this objective.

A plan of management development directed toward this objective necessarily breaks down into two major subdivisions: the *theoretical* and the *practical*. Both are parts of a simultaneous, interrelated, and inseparable process. The theoretical phase is largely the domain of the training staff, while the practical is almost entirely the sphere of the line organization.

Theoretical Aspects of Management Development

The theoretical phase looks to the manager's intellectual development. The multiplicity of highly diversified problems that is encountered in the current industrial situation calls for mental capacity of a high order. The manager's mental and social horizons must be broadened, his depth of viewpoint increased, and his ability to analyze complex situations sharpened. This is not achieved by limiting one's education to one's own experience or to the experience of a small group of one's associates.

Rather than learning techniques and skills for handling pat situations, what the manager really needs is a deeper understanding of the theoretical information that has been amassed in the various fields of knowledge that bear on the art of managing. Armed with such an understanding, he is then in a position to develop the solution that seems to best suit the problem of the moment.

To this end, the manager needs education in the cultural and intellectual aspects of the profession. And this should be the primary purpose of all organized group training and instruction. Admittedly, those of us who have been concerned with train-

ing have often strayed far from this target. We have embarked on numerous long and circuitous detours. But regardless of where our experimentation has taken us, sooner or later we have again found ourselves up against the proposition that a good portion of the manager's training must be scholarly in nature and, to a considerable degree, of the academic and bookish type.

The Practical Phase

Looking now to the practical phase of the manager's development—the phase referred to as being the responsibility of the line organization—this is simply the internship, the on-the-job training and guidance of the subordinate by his immediate superior, that has been the traditional manner in which supervisors have developed down through the years. This is the practical application, under authoritative and competent guidance, of the general and abstract information gathered in the classroom situation.

It should be emphasized, however, that the informal, hit-or-miss system of former years is not implied here. To be effective, the manager's development by his superior must be formalized and placed on a systematic footing. Each superior throughout the organization must be made to understand that the conscious development of his immediate subordinates is an important—if indeed not the most important—part of his job, and one for which he will be held immediately and directly accountable by his superior.

At regular intervals, each superior must sit down with each of his subordinates and apprise them of their strengths and weaknesses, helping each man to map out his own program of self-improvement and offering suggestions and advice to this end. Between these intervals, the superior should be continually spot-checking performance and observing progress.

This phase of management development has authoritarian overtones. It is training by example rather than by precept. It sets up a mechanism that tends to force the application of theoretical concepts acquired in the classroom situation.

When carried on in this fashion, this phase of the manager's development is not unlike the internship of the young physician. The chief difference is that the manager's internship never ends and is simultaneous with his theoretical study. The young medic is now ready to remove his first appendix. Back of him are countless hours of academic preparation. He is well grounded in all the biological functions that may become controlling factors during the course of the operation, information he may have to draw upon as he proceeds. Hovering in the background is the skilled surgeon, ready to advise, counsel, and instruct. But at long last he must do this thing himself, at long last he must reach into a living, breathing human being and withdraw the offending organ.

Theory and application are meshed to impart to the intern a new competence that could hardly have been acquired by pursuing either alone. No amount of theoretical study could ever impart competence in the performance of the actual operation.

Conversely, practice in performing the technique, without a complete knowledge of anatomy and physiology, would develop a superficial mechanical competence that would quickly deteriorate in the face of complications or any departure from the normal.

So, too, the two phases of management development are mutually reciprocal. A plan that emphasizes either one—theoretical study (organized group training), or guided practical application (coaching of the subordinate by the superior)—to the exclusion of the other is like an automobile without an engine. Moreover, each seems to encourage the development of the other. Parallel emphasis on the two phases tends to inculcate in the student an appreciation of each of their merits. The one points up the meaning and relativity of the other.

If our assumptions to this point are sound, if the training man's job is to contribute to the trainee's intellectual development and help him develop the powers of discernment, perception, analysis, and objectivity which are the hallmarks of professionalism—to help him gain familiarity with a fund of knowledge in the various fields bearing on the practice of his profession so that he may be able to develop solutions to the problems and situations that arise—then we are ready to see where the lecture as one technique for accomplishing this fits into the scheme of things, if indeed it fits at all.

Resistance to Training

But to do this, we must first take a look at the ghost that walks hand-in-hand with every training man: *supervisory resistance to training.* Some 40 years ago, the pioneers of management training made a shocking discovery: Managers — supervisors — exhibited an almost antagonistic resistance to training. They still do. Managers should have been anxious to learn more of the art of managing. They should have been anxious to avail themselves—usually on company time and at company expense—of instruction that would enable them to become more competent managers and would, in the long run, mean more money in their pay envelopes. An entirely reasonable and logical conclusion. But it did not work out that way. Something misfired.

When it was first generally recognized in industry that managers—foremen and supervisors — needed training, the problem was attacked head-on. The managers were simply called together in a classroom and lectured by an instructor. But somehow the classic method of instruction didn't work in this situation.

Where the student should have been appreciative of this opportunity to upgrade himself he was, in many cases, openly resentful. Everything that has been done since has been tempered to some degree by this initial discovery. The bewildering array of training techniques available today is largely the result of a continuing effort to find some way of rendering training palatable to managers.

This has been, in a sense, the great tragedy of management development. For it has tended to obscure the root of the problem and has focused attention on its outward manifestations. The search for a remedy has often been directed to the symptom—and in-

cidentally some good ones have been found—without looking to the disease itself. We have been not unlike a group of physicians who, confronted with an outbreak of malaria, set madly about to find a specific—a treatment—for its symptoms. Whereas the treatment and the suffering could be more effectively eliminated by isolating the cause and attacking that.

In the belief that it was the method that had inspired the manager's resistance to their ministrations, training men turned their attention to the development of still other methods and, in so doing, touched off the preoccupation with methodology that has remained with us to this day—a preoccupation so intense that in all too many cases the search for the technique or the device has unconsciously become an end in itself. Amid the proliferation of techniques and devices, the training director has all too frequently lost sight of his real purpose. The methodology has come to be mistaken for the thing itself.

Pondering this problem, we at Cities Service reasoned that, if our difficulties could ultimately be traced back to the supervisor's resistance to training, an analysis of the nature of this resistance might afford some clues as to how it could be overcome.

Basic Causes of Resistance

We surmised that the latent resistance of the average manager to organized group training had two basic causes. First was the simple human resistance to change, and second the manager's experience with training—the way he had been trained. Each manager has hammered out for himself some pattern for handling his job. There is a natural reluctance to leave the old, familiar paths and step gingerly into the unfamiliar, the unknown—particularly when the advocate of these new ways is a teacher from an educational institution or a staff employee, neither of whom, the student manager suspects, has ever had experience on the firing line.

Nor is there anything abnormal about the manager's resistance to the suggestion that he may be able to learn to do his job better. It is a condition that derives logically from the nature of his work. He is accustomed to command and authority; he is accustomed to telling other people what to do and how to do it; he must continually exercise independent judgment and arrive at his own decisions; he is frequently solicited for advice and counsel by his subordinates; and his statements and opinions bear a certain weight of authority and respect within his own limited domain. Considering all these factors together, isn't it only natural for the supervisor to develop a certain feeling of personal infallibility? Or, to put it another way, under these circumstances a man develops considerable respect for his own judgment. He is inclined to reject the idea—especially when advanced by some staff employee—that some of his methods are incorrect or subject to improvement. He frequently feels that it is he who should be teaching the teacher, and not vice versa. He usually considers himself a successful man; and after all, haven't these very methods made him so? The fact that he is still a manager proves—at least to his own satisfaction—the efficacy of his approach.

The other factor contributing to managerial resistance to training is, as has been said, the manager's experience with training—the way it is generally conducted. Training people have felt constrained to take a vastly complicated profession, digest it into simple rules and cliches, and serve it up pre-cooked and pre-digested to their "pupils." That the "pupils" have found this slightly nauseating is not surprising.

Limitations of Managerial Training Methods

Training people from the start have exhibited a tendency to package the most complicated propositions into easy capsules to be swallowed in one gulp. For some inexplicable reason, it has been assumed that the subject matter used in the manager's instruction must be inordinately specific. The abstract, the theoretical, is to be avoided as if it were the plague. As a result of this unnatural emphasis on oversimplification, it would perhaps not be too inaccurate to say that managers generally are the most talked-down-to group of people in our social order.

On the other hand, training men who have been able to resist the temptation to vaccinate the manager with simple platitudes have frequently gone to the other extreme. This we might label the "let them teach themselves" theory. Instead of using the "here's how" approach, the teacher makes no attempt to bring anything to the group—the necessary know-how is assumed to be already there. He becomes a conference leader whose task is to encourage the group to pool and share their combined knowledge and experience. Of course, this approach is effective to a degree. But it has definite limitations. At best it can result only in a sharing of such knowledge and experience as the group possesses. The whole can never be greater than the sum of its parts.

The discussion technique affords no means for injecting new thinking and new information. Too often, such discussions wander in an amorphous vacuum. There is no backdrop of proven or even theoretical values. There is no frame of reference for checking and trying opinions and ideas. And there is always the danger that the group will pool ignorance and prejudice rather than knowledge and logic.

Training people are aware of these limitations. So are the students—the managers. They feel the same sense of futility and frustration that meetings such as these very often provoke in the discussion leader.

The foregoing analysis suggests that the manager's resistance to training has its roots not so much in training itself but rather in the *manner* in which his training has been carried out. And, if the analysis is sound, there is a strong inference that the manager's resistance grows out of the fact that he, more than anyone else, realizes that his is a job that is not reducible to simple rules having standard applications that will produce standard results in standard situations; or that all the information he may need lies within the confines of his own experience or that of his immediate associates.

Perhaps the manager instinctively senses that he is practicing a complex profession. Rooted in his con-

sciousness may be the conviction that he needs help and instruction. And to his everlasting credit, apparently he realizes that neat little rules won't solve his problems. He, above all others, appreciates that you do not successfully handle people by mechanistic manipulation.

To be sure, managers may not be able to express these sentiments. Indeed, they may even be extremely reluctant to admit such feelings publicly, and understandably so, for they have been forever on the defensive. They find themselves in an atmosphere where, despite universal agreement that technical know-how and other such information are acquired through formal study and learning, the ability to manage is regarded as being in some strange world apart. It is acquired through some mysterious rubbing-off process resulting from mere association with other managers.

Thus, if it was the manner that the manager found objectionable and if he instinctively sensed a need for a broader intellectual comprehension of the theoretical aspect of his profession, we concluded that he might be receptive to more direct instruction presented in a manner more in keeping with his intelligence, his status, and the complexity of the task confronting him. It was this conclusion that started us on our experimentation with the lecture as a management training technique.

The Lecture Technique

Obtaining materials presented no problem. There is an abundance of training materials available. New concepts of management are continually evolving. Some of the best minds in the country are at work on the problems confronting present-day management. A tremendous amount of study is being done. Entire businesses are experimenting with new management methods. New principles are being developed and old ones are being expanded. Out of all this hive-like activity, a prodigious amount of literature is being added to the existing information on the subject. Not only is this in the form of books and articles, but in speeches delivered at the ever-increasing number of conferences and meetings. Some of this information, of course, is not sound; but much of it is.

So it can be said that our resort to the lecture was prompted by three factors: (1) We were convinced that the basic objective of group training is to help the manager acquire a professional attitude toward his job; (2) our analysis of his resistance to training had led to the conclusion that the manager might respond favorably to the lecture if it were properly presented; and (3) here, lying practically unused, was this wealth of literature and information.

From the very start we were sure that an in-plant training man could not successfully deliver a lecture in the manner of a college professor. But we did feel that an outsider with a great deal of prestige and stature in his field might be able to do it, especially if he were a forceful and persuasive speaker. Furthermore, we did not feel that a one-shot lecture to the total supervisory group would do the job we wanted to do.

When we had located a man who,

we felt, would be right for our purpose, we merely substituted him as the leader in a regular series of meetings. He gave the same lecture to 15 groups of from 15 to 18 men each. There was no attempt at group discussion. The speaker did not try to make a one-shot injection by packing all the principles of management and human relations into a single lecture. He limited himself to one relatively narrow subject—an analysis of authority. He avoided talking down and oversimplification. On the contrary, he gave the groups something to reach for by exploring all the complexities of the subject. He purposely aimed over their heads, rather than under them. Enthusiasm for his lecture ran so high that many of the men sat through his lecture a second time, a few even a third time.

Supervisory Reactions

The real payoff came in follow-up meetings where the regular in-plant conference leaders conducted a discussion in which the general principles laid down by the outside lecturer were tried and tested against specific plant problems. Here again, interest was high, for these discussions proceeded within an authoritative frame of reference. Here the discussions did not wander aimlessly in a void: they had both direction and purpose. The following year the process was repeated, using another outstanding authority. Again the results were good; again the "students" were enthusiastic.

For want of a better name, we have called this the "outside authority technique." To be sure, there's nothing revolutionary about it. Many people have done the same.

We did, however, take some precautions, not significant at first blush, but nevertheless extremely important. First, we took care that the outside lecturer was a man whose background and stature in his field were such as to lend a weight of authority to his views so that supervisors, even if they did not accept his observations, would at least consider and weigh them. Second, we made sure that he was a capable and dynamic speaker. Third, we saw to it that he avoided any attempt at discussion. Fourth, his talk was confined to small groups. And finally, he talked about a narrow subject and stuck to the general and the abstract rather than the specific and the "here's how."

It must be admitted, however, that this approach has some definite limitations. It is almost prohibitively expensive, especially in a small plant. Even more to the point, men of the required dimensions are few and hard to get. Hence, we set about trying to find some variation, some in-between approach that would be acceptable to our students yet would not be so expensive or unattainable.

An Alternative Approach

Each year, our total management group is required to fill out an anonymous questionnaire. This is somewhat in the nature of a supervisory attitude survey. On the annual questionnaire following the second use of an outside lecturer, we posed the following question:

We have on two occasions had outside authorities (Mr. Finlay and Dr.

Sartain) *in to conduct a series of lecture meetings. Do you think*:

1. It would be a good idea to continue bringing in such authorities?
2. It would not be a good idea?
3. It makes no difference?

Two hundred fifty-six supervisors completed the questionnaire. Of these, 92.5 per cent felt that it would be a good idea to continue bringing in such authorities; 2.0 per cent felt that it would not be a good idea, and 5.5 per cent felt that it would make no difference.

Then, as a stab in the dark to test their reaction to the same thing done by our own training people, we also asked this question:

We have always avoided a direct, teaching-type meeting. Do you think that an occasional meeting of this type with the leaders using information developed from research and study of various books and articles would be acceptable by the group or not acceptable by the group?

In reply to this question, 97.6 per cent said that such a meeting would be acceptable to the group and 2.4 per cent said that it would not.

The following year, we acted upon the majority opinion. On the next annual questionnaire we asked this question:

On last year's questionnaire we asked you if you would like the conference leaders to give you an occasional lecture based on the writings, speeches, etc., of authorities in the field of management. During 1953, *three such meetings were conducted. What is your opinion? Was this good or was it not good?*

In reply, 96.4 per cent said that it was good, 2.3 per cent said that it was not good, and 1.3 per cent expressed no opinion.

So, despite the fact that the lecture as a management teaching tool has been written off in some quarters, there appear to be at least two ways in which it can be used with considerable success.

Some Do's and Don'ts

There are, however, some important do's and don'ts, especially when the lecture is given by in-plant training people. To begin with, it should be used sparingly. Two or three times a year is about the limit. Furthermore, I am inclined to feel that it will be more readily accepted by supervisors who have several years of conventional training under their belts. The subject matter should be carefully chosen to apply to some area in which current difficulty is being experienced. The approach should be largely theoretical as opposed to the specific. Visual aids, especially slapboard, chart, and blackboard, should be used to give variety and color and to heighten interest. No matter how eloquent the in-plant leader may be, it is rather difficult for him to be dynamic with the home folks.

The in-plant leader should take care also not to create the impression that the material is his own. The author or authors from whose material the lecture is drawn should be introduced very much as though they were actually present. Where possible, the books and documents should be on display. Further, the information should not be treated as though it were the Gospel according to St. John. Being of a theoretical and abstract nature, it is

obviously open to question. It should be presented simply for what it is: some of the best of the current thinking on the particular subject. The leader should stress that whether the managers agree with it or whether they find it applicable to their individual situations is entirely up to them.

The leader should recognize that his task is not to hand down edicts from Mount Olympus or to provide answers to specific problems. It is rather to present background information of a general nature that may have practical application to specific problems.

We have had occasion to give demonstrations of one or two of these little lectures. A chemical company became interested and asked us to give a demonstration for their top management group. They liked it. As I remember the reaction, it went like this: "We would be resentful if one of our training people were to preach us a sermon along this line and prescribe for us a better way of doing our jobs. But we are completely receptive to the idea that our training people have surveyed the best of the literature on a subject and presented it to us in as interesting a manner as possible for our consideration and appraisal."

On another occasion we gave one of these homemade lectures to a professional society. Many of the members were supervisors in their own plants who participated in an in-plant management training program. They, too, were enthusiastic. Several commented along this line: "We keep going to these training sessions looking for something, expecting to get something. But nothing ever happens. We just beat the same old problems around, over and over, and rarely if ever pick up any new ideas."

Under no circumstance would I suggest that the lecture is a cure-all, or that all the many other fine techniques do not have a place in any plan of management development. My point is simply this: If one objective of management training is to give managers a professional concept of their jobs and then to help them upgrade their professional proficiency, the purpose of organized group training should be to supply the manager with theoretical information; to provide new concepts against which old methods may be checked and tried; to help him broaden his mental horizons, develop his perception, and enhance his power of analysis and discrimination. The lecture is a powerful tool for fulfilling this purpose. And it has been our experience that it can be employed in a manner that is acceptable to supervisors.

. . . Most companies would point to the foreman as the member of the management team most in need of human relations training. But what can a human relations course achieve if the foreman's boss happens to be of the old school?

Human Relations Training: The Missing Link

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MANAGEMENT, almost without exception, has "got religion" since the days of Mayo, Roethlisberger, and Whitehead at Hawthorne; it admits that workers, after all, may be human and has taken steps to incorporate that discovery in its dealings with employees. Too often, however, these faltering first steps have been limited to the "playpen" of the personnel department and altogether too rarely have they carried over into the rough-and-ready world of the production floor.

How many times has the training director, the consultant, or the social scientist heard the foreman's lament:

"Don't tell me, tell it to my boss!"

Many reports refer generally to the discrepancy between the ideal situation assumed in the human relations training course for foremen and actual working conditions under a "bull of the woods" general foreman. This article will demonstrate how one segment of management's attitudes and values can vary from and subvert what another segment of management professes in training courses.

It will show that attempts to change the behavior of one category of people, say foremen, will be extremely difficult, if not impossible, when the other people in the environment do not accept the change. This is especially so when superiors do not or will not accept the change.

The analysis draws, in part, upon a study of 202 automobile assembly-line workers conducted under the direction of Charles R. Walker, Director of Research in Technology and Industrial Relations, Yale University. It is based mainly on the author's independent survey of supervision at Plant Y.

Foreman-worker relationships at the plant could hardly be termed exem-

plary.[1] Of the 200 workers who were interviewed (the sample included employees with at least 12 years' seniority), only 17 thought that foremen got along very well with their subordinates. Fifty-six thought the relationship was good; 63, only fair; and 58, poor. In other words, about 40 per cent of the workers rated the relationship as good or very good and some 60 per cent judged it to be fair or poor. (In passing, it may be mentioned that management recognized that the over-all situation, part of which is described here, was unsatisfactory. Shortly after the research had been completed, there were a number of high-level personnel changes. Although no further studies were made at Plant Y, various sources have reported considerable improvement.)

General foremen, in their semi-annual ratings of foremen, provided a candid admission of what they (and their superiors) considered to be important in a foreman's behavior. Foremen themselves supplemented this official valuation with accounts of their daily experience. Workers, from the vantage point of bystanders, also commented on the foreman-superior relationship.

The management of Company Y, through plant and specific job design as well as through its organizational structure, circumscribed to a considerable extent the behavior of the foreman toward his subordinates. Much of this particular company climate was peculiar to assembly-line technology and the author has discussed these influences elsewhere.[2] For the purposes of this paper, management's attitudes and values will be considered as they were expressed through the behavior and statements of superintendents and general foremen.

Management Values

When interviewed, general foremen and superintendents did not offer many specific criteria of "good" foreman behavior generally, let alone of good behavior toward workers. They commended most often those subordinates who carried out their responsibilities without constant consultation with, and dependence upon, their superiors.

The most concrete expression of management's values was obtained from the general foremen's semi-annual ratings of their subordinates. These reviews were initialed by the department superintendents, who presumably agreed with the emphasis placed by general foremen upon various aspects of the foreman's job.

In these reviews, general foremen ranked the foremen on their over-all performance, singled out their outstanding qualities, and noted where improvement was needed. Their comments fell into four major categories: technological, personal, administrative, and employee relations.

Technical competence in foremen was highly valued by their superiors: Good job knowledge appeared as a

[1] Published reports on Plant Y, dealing with other aspects of assembly-line technology, include: Guest, R. H., "Men and Machines," PERSONNEL, May, 1955, pp. 496-503; "A Neglected Factor in Labour Turnover," *Occupational Psychology*, October, 1955. Turner, A. N., "Foremen—Key to Worker Morale," *Harvard Business Review*, Vol. 32, No. 1, 1954, pp. 76-86; "Interaction and Sentiment in the Foreman-Worker Relationship," *Human Organization*, Vol. 14, No. 1, pp. 10-16; "What Makes a 'Good' Foreman," PERSONNEL, March, 1955, pp. 382-392.

[2] Jasinski, F. J., "Status and Role of Assembly Line Foremen," unpublished Ph.D. dissertation, Department of Anthropology, Yale University, 1955.

positive attribute on every rating. Personal characteristics ("cooperative," "willing worker," "neat appearance") ranked second in importance; administrative qualities ("follows company policies," "accepts orders and instructions," "carries out orders") ranked third. Only 9 per cent of all qualities cited by the general foremen concerned a foreman's relations with his employees.

Each performance review commended a foreman for acceptable behavior and criticized him for deviations from the standards set by his superiors and management. A foreman soon learned what his boss considered important; if he wanted to succeed as a foreman he accepted the values of his general foreman and strove to improve along the lines set down by him.

Obviously, having technical "know-how," being "cooperative," and carrying out orders were far more important than employee relations. Foremen, general foremen, and superintendents were well aware of employee resentment; in the face of employee complaints, many of them fell back on the proverbial retort: "If you don't like it here, why don't you quit?"[3]

Yet, despite the generally unfavorable foreman-worker relationship, only one foreman was specifically criticized for his "uncompromising attitude in dealing with his employees." (On the other hand, this fact did not prevent the general foreman from giving this particular foreman the highest rating, signifying "an employee whose performance is outstanding and who is immediately qualified for promotion to a position of greater responsibility." The superintendent who initialed the review apparently concurred.)

Whether or not foremen maintained a harmonious relationship with their employees did not appear to disturb their superiors. The subject was barely considered in the performance reviews. When it was, the general foremen seemed to feel that for foremen to control their employees was more important than the way it was done. In fact, the foreman's bosses were more apt to feel that he was too lax with employees and didn't discipline them enough.

Some typical comments that appeared on the ratings were:

¶ Very aggressive and controls employees well.

¶ More forcefulness required to increase the efficiency of the operators.

¶ He is lax in controlling his people.

¶ Knows his job well and has good control over his employees.

These performance reviews provide the foreman with guideposts for behavior. From them he learns that some things are more important to his superiors than "good" employee relations—that it is more important to control his employees than to have them regard him as a "great guy."

Foremen Reactions

In these reviews we see reflections of the management policies and values which the foreman encounters every day—every time he sees his general foreman and his superintendent. The reactions of the foremen to these experiences are reported below.

Foremen are almost as human as workers, management will admit. At least, it is conceded that they seem to

[3] For a detailed exploration of foreman-employee relations, see A. N. Turner's two articles: "Foremen—Key to Worker Morale" and "Interaction and Sentiment in the Foreman-Worker Relationship," *loc. cit.*

have some of the unpredictable frailties common to the species. Companies have tried to counteract these shortcomings in various ways: They have introduced new status symbols, polished up some of the old ones and moved them to the front part of the shelf, and endeavored to increase effectiveness on the "firing line" through better selection and training.

The management of Plant Y followed the customary corporation policy of keeping foremen's salaries at least a fixed percentage above the wages of hourly workers. Among other symbols of status, the company provided reserved parking areas, maintained a 'white-collar' cafeteria, and granted discounts on corporation products. It also operated a training program for which foremen were excused from work once a week. (When a second shift was begun, new foremen attended every day.) At one time, also, the company subsidized foreman attendance at an outside "How to - - -" course.

The training courses were as good as most offered in industry. They "covered" various aspects of the supervisor's job: motivations, differences in personality, how to deal with people, how to orient and train new employees, cost control, quality, and the like.

Nevertheless, as has been said, there was a discrepancy between what one management representative (the training director) preached and what other representatives (general foremen and superintendents) practiced. This variance was not limited to semiannual performance reviews—it happened every day.

¶ In foreman training we're taught the kid-gloves approach (toward employees), but on the job your boss says the opposite.

This duality was well exemplified in two areas: the training of new employees and the treatment of employees generally.

Foremen were advised that a new employee had to be carefully introduced both to the work situation as a whole and to his specific job. This required special techniques, patience, and a certain amount of time. A foreman was not to expect that a man would, or could, learn a job and produce at peak efficiency immediately or even within a day or two.

Further, management made similar allowances in drawing up job descriptions. Although most of the jobs at Plant Y called for no previous experience and nearly three-quarters of them required no training beyond initial instruction, management said that 96 per cent of new employees would need a week or longer to reach top efficiency.

Half the foremen admitted that, because of the other demands of their jobs, they didn't train new workers. The rest did so only (1) when they had time, (2) on off-line or subassembly jobs, and (3) in initial instruction. Most of the time, it was the utility operator who did the actual training. The training period, however, was usually short-lived; the utility man was soon called elsewhere to substitute for an absentee. (Division management has recently recognized the role the utility man plays in training. It has not only begun to teach the utility men how to train, but has also provided, manpower-wise, for the training period.)

At Plant Y, foremen blamed the inadequacy of training procedures on the attitudes of their superiors. They were compelled to reassign the utility operator in two or three days on the direct instruction of superiors or, more often, because manpower was not forthcoming to substitute for absentees. Much of the constant "emergency" and many of the "quits" they attributed directly to incomplete training:

¶ The general foreman expects the man to be completely ready in two days. In other words, he wants that other man free. Well, I don't blame him, because that's the way the company makes money, but it's pretty hard. In fact, that's why the men quit. The general foreman knows in his heart and soul that it's impossible for the man to be ready for the job in two days, and yet the men are turned loose before they're quite ready for the job, and it's too much for them. That's why they quit.

¶ We have three months in which to decide whether a man is satisfactory or not. (*This is the probationary period before a new employee becomes a member of the union.*) Actually, though, from a practical point of view, I have to decide in two or three days whether or not he can hold his own.

¶ You can judge pretty well after one or two days whether or not the man is going to handle his job. But you can carry a man for four or five days, if need be. One day, though, I had a new man come in to get broken in, and so I got the man about eight o'clock and I was just working with him for about half an hour, letting him do the easy work, and I was doing the actual pulling of the hoist before the drop. At 8:30 my general foreman came by and said, "Well, this man ready to work yet?" I said, "Of course not, it takes at least three days before he can handle this or else kill himself." There's a lot of control buttons you have to watch, and the grappling hooks that hold the piece up, and if you're not careful, you're very likely to toss the thing off the hooks and hit somebody over the head.

¶ I decide if a man is satisfactory by observing him at his work; I make allowances for effort. That is where my big trouble is with higher supervision. "Get rid of them," they say.

Foremen also felt that their relations with their employees were disturbed by interference from their superiors. They complained that general foremen and superintendents by-passed foremen to chastise workers, reprimanded foremen in front of the operators, and interfered with personnel assignments:

¶ The general foreman and the superintendent interfere with operators. They tell the hourlies what to do and how to do it in such a way that men just quit. They should leave a foreman alone. Also, it weakens a foreman's position with the men.

¶ And you also get these general foremen who just don't have the knowledge on the handling of employees. A guy can be doing a good job for five, 10, 15 years, and then maybe he has a lapse for a little while, and his work is not quite up to what it should be, and so these general foremen say, "Get rid of the guy, he's not doing his job." They don't look into the background to see why he's not doing a good job right now, and has been doing a good job all along.

¶ It takes only one or two of supervision to make friction between workers and supervision. Take the general foreman. He's the bull-of-the-woods type. He'll never admit he's wrong.

¶ I would insist that the general foreman not bawl the men out but act through the foreman. Also, if the general foreman chews out the employees, or the foreman in front of the employees, it should be his last time.

In short, the foremen were well

aware that they were often unable to use the techniques or the theory of the "effective" supervisory practices they were taught in training classes. Though they learned special techniques for training on the job, only half of them were ever able to do any training, and the remainder did so only under special circumstances. Further, though management theoretically did not expect the new employee to reach peak efficiency for at least a week, the general foreman, either by direct order or by failing to supply adequate manpower, cut this time to a day or two. Though foremen were taught the "kid glove" approach in training, not only were they discouraged in many instances by their superiors from putting it into practice; but, all too frequently, the general foreman and superintendent by-passed the foreman to deal with hourly employees directly and in such a manner as to undermine any good will the foreman had managed to develop. A few foremen circumvented management practice, as they found it on the floor. This, however, was difficult to do in the constant shadow of an unsympathetic general foreman, and most foremen behaved in the manner expected by their superiors.

Comments of the Workers

Although the workers had direct contact with the general foremen only once a week, and with the department superintendents less frequently, they also reported interference by these superiors in foremen's operations. They singled out the making of personnel assignments by the superior, his censuring of individual employees, overruling of foremen's decisions, and otherwise by-passing of the foreman in dealing directly with workers. Without these interferences, the workers felt, some foremen might have promoted better relations with their employees:

> ¶ That son of a bitch! (*The general foreman.*) He don't talk; he grunts. He'll put you on a job and he'll say, "If you can't do the job, get the hell out of here. We don't want men like you."
>
> ¶ And the general foreman overrules what the foreman learns in school. If the foreman tries something new, the general foreman tells him to run it his way or else. It looks good on paper, but that's all.
>
> ¶ Our gripe isn't the foreman, but the general foreman. He tries to run the whole show and tell the foreman what to do. On the whole, I'd say our foreman is a good foreman. I know if he were left alone, we'd get along 100 per cent better.
>
> ¶ When I was foreman, it wasn't what it was cracked up to be, because you were supervisor in name only. You had no authority. Anything you wanted to do, you had to go to somebody else to see if it was all right to do it.

Despite their awareness that a foreman could be a "good Joe" outside the plant and that much of a foreman's behavior was due to the attitude of his general foreman, the workers, nonetheless, tended to hold the foremen themselves responsible for "bad" behavior. In addition, they viewed foreman behavior as representative of management policy — which, in a way, it was.

Conclusions

Plant Y illustrates, in the extreme perhaps, how a training program must fail unless the principles professed by

management are translated into actual practice.

This study underscores how important it is for management to realize that foreman behavior is determined, in large part, by the people with whom he interacts. How the various groups behave toward each other depends, in turn, on the atmosphere—or culture—management has created over time.

In this instance, the foreman-worker relationship left much to be desired. Many workers voiced negative attitudes toward their foremen, toward the company, and toward their jobs. Foremen and middle management adjusted to the situation by adopting the "if-you-don't-like-it-here-why-don't-you-leave" attitude.

On the one hand, management sought to change this relationship by training its foremen in "human relations" techniques. But since it failed to establish an environment which would accept a change in the foreman's behavior, this attempt also failed.

General foremen, in their performance evaluations of foremen, placed a low value on "good" employee relations; they were more apt to criticize a foreman for lack of control than for "poor" employee relations. In their daily contacts with foremen, general foremen and superintendents counteracted and indeed undermined whatever good will a foreman might have built up.

On the other hand, the workers, having adjusted to the environment over a long period of time, also resisted change in a foreman's behavior.[4] One foreman, newly appointed from the ranks, reported that he had tried to behave toward employees as he had wanted his foreman to behave toward him when he was an hourly operator. To his chagrin, he discovered that the employees would have none of it:

> ¶ You can't treat the men as equals. They take advantage of good treatment. When I used to be a man on the line, I knew the way I'd like to be treated if I were to be happy on the job. When I got to be foreman, I started to treat my men in the same way—in other words, the way I'd like to be treated—but you just can't do it. *You can't change overnight what's been going on for 15 years*, and these men have been just spoiled by not having too good supervision in the past. Now I treat my men the way they have been treated in the past. . . . They can always quit if they don't like the job.

In fact, the training of foremen, without regard for the environment, may not only fail to achieve the desired changes in behavior but may even prove detrimental. A foreman who has been brought up in the old school may suddenly discover in his training class that he has been using the wrong approach with employees; he may want or even try to change, but the superior who originally "schooled" him may successfully object. In the light of his new-found knowledge, a foreman may make promises which he is in no position to fulfill because of his lack of authority, or his superior's opposition. A number of studies show that morale and productivity suffer as a result.

Changing behavior is a complicated, long-drawn-out process. Behavior is reciprocal: a person behaves toward or with someone. Behavior between

[4] cf. Ronken, H. O., "Looking Around," *Harvard Business Review*, July-Aug., 1954, pp. 137-154.

two persons may be and often is influenced by a third. And most behavior in an organization derives its direction and tone from the cultural environment of the organization.

If management considers changing behavior, it should decide what the behavior is at the moment, how it has evolved and is maintained, and in what ways it could be most effectively changed. Training of foremen is only one—and perhaps a minor—step.

. . . How the Palauan islander reacts to the disruption of his traditional way of life may seem a far cry from the problem of the line supervisor who sees no point in the staff man's new-fangled ideas—but the distance is not so great as might be supposed.

Improving the Relationship Between Staff and Line

An Assist from the Anthropologists

J. M. JURAN*

INDUSTRIAL effectiveness has been greatly aided by the use of the "staff" concept, under which "staff" personnel, making use of time, perspective, objectivity, and special skills seldom available to line supervision, have carried out a host of vital tasks. Staff *advisors* have given legal, financial, economic, and other forms of counsel. Staff *coordinators* have prepared sales plans and production schedules. Staff *control* men have inspected the product and audited the books. Staff *utility service* men have conducted process research, run the employment department, written insurance, and maintained the physical plant.[1]

The price that is commonly paid for this improved effectiveness is often a strained relationship between line and

[1] For a penetrating discussion of what is "staff," see *Papers of the 9th International Management Congress, Brussels, 1951*, Section 1, "The Structure of Large Enterprises," pp. 5, 6.

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staff personnel. There are multiple causes of this strain in the organization—honest differences on jurisdictional boundaries, empire-building tendencies, confusion as to extent of "authority," and so on. But implicit in all of them, and running through all the forms of staff work, is the fact that the line supervisor is called upon to *adapt himself to changes proposed by the staff specialist.*

This is a difficult situation. The staff specialist exhibits a fierce loyalty to his brain child. The line supervisor is no less loyal to the habits and traditions he knows and understands. Small wonder that the resulting differences sometimes erupt into charges about impractical theorists, or backward old-timers.

Now, from an unexpected quarter, comes a flash of illumination.

For some years, numerous technical experts employed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) have been introducing technical changes into industrially "backward" countries. These technical changes have involved agriculture, transportation, power development, public finance, public health, etc. The problems faced by these experts in the "purposive introduction of technical change" are brilliantly analyzed in a new book,[2] *Cultural Patterns and Technical Change*, edited by the eminent anthropologist, Margaret Mead.

This venture into anthropology has much to do with the staff and line relationship in industry. The common problem is the impact of new technical ideas on members of established societies ("cultures"). But the UNESCO analysis is more comprehensive, more incisive, and more practical in its exposition of principles than any related study in industrial literature. This same set of principles, translated into industrial dialect, might well constitute a code of practice for industry's staff specialists. So far as the writer is aware, nothing in industrial literature so admirably covers the needs.

The Concept of Culture

The starting point of the UNESCO book is the concept of a "culture." "Culture" is a "body of learned behavior," a collection of beliefs, habits, practices, and traditions, shared by a group of people (a society) and successively learned by new members who enter the society. A "culture," as thus defined, can be found in a factory, an office, a mine, a warehouse, a company. The older the institution, the more certain it is to have developed such a "body of learned behavior."

Culture is not a kettle full of loose, disconnected pieces. Rather, it is a unified whole, no element of which can be disturbed without repercussions on a wide scale. As the book points out:

> . . . Once an agricultural specialist has included in his expectations the possibility that in his attempt to get land organized in fields sufficiently large for the use of agricultural machinery, he may have to take account of graves and ghosts, sacred trees, oracles, shrines, dowries, sex habits and unborn children, as well as inheritance, property laws, rights of way, and "ancient lights," he will then be more ready to follow out the implications of any particular re-

[2] Margaret Mead, Ed., *Cultural Patterns and Technical Change*, United Nations Educational, Scientific and Cultural Organization, Paris, 1953. Reprinted as a "Mentor Book" by the New American Library, 1955.

sistance which he meets in the foreign country where he goes as a specialist.[3]

The existence of this unified culture requires that before change is made, the whole culture must be taken into account. Failing this, there is a risk that the members of the culture will be forced to make the unhappy choice of either accepting the destruction of traditions that are important to them or sabotaging the program of change. The technical expert convinced of the logic of his proposed changes (from *his* point of view) and oblivious of the unity of the culture he is disrupting is inevitably headed for trouble.

The UNESCO book describes several whole cultures. These descriptions are of value not merely because they reveal the broad spectrum of human behavior; they are valuable also because many seemingly strange human practices have startling counterparts in modern industry.

Among the Tiv of Nigeria, for example, health is not a separate concept or body of know-how. Disease, accident, death are all regarded as part of the mystic potency (*tsav*) of individuals. The man with plenty of *tsav* can conquer disease; lacking *tsav*, he goes under. Likewise today, in one company after another, we find the comment "Show me a good operation and I'll show you a good branch manager (or foreman)." As with the Tiv, management success is attributed to the "savvy" of the individual, rather than to skill in the use of a body of management know-how.

The Burmese have had difficulty in accepting government by precedent. Likewise, many companies today have had difficulty in adopting "standard practice."

To the Greek peasant, self-esteem is paramount. To suggest that he is backward and needs the help of an expert violates this self-esteem. So it is with many of today's shop supervisors.

The Palau island elite have some interesting trappings of authority such as the right to five entrances to their houses and a special type of hair comb, right of way on the village paths, and so on. Of the same order are the symbols of status of the modern industrial elite: the office carpet, the stall in the company garage, and the key to the executive washroom.

Equally recognizable is the defense of the Palauan when accused of violating regulations. "Fabrication of the facts was and still is a well-developed art. A more common procedure is to acquiesce overtly to any orders given but actually to evade their execution while verbally simulating compliance. The order might even be enthusiastically applauded and then either 'misunderstood' or worked at without ever being quite accomplished."[4] Similarly, the "yes" of the Spanish-American workman often means "You are the boss, so I agree." In the same way, modern industry harbors yes-men who "go doggo," "act dumb," or "drag their feet."

Psychological Principles Influencing Acceptance of Change

From this series of studies in the introduction of technical change into established cultures, the UNESCO book develops the *psychological*

[3] *Op. cit.*, p. 21.

[4] *Op. cit.*, p. 137.

principles to be observed by staff experts. Expressed in industrial language, and exemplified, these principles are as follows:

1. *The staff specialists who propose change must understand that the premises on which they base their proposals are merely products of the culture in which the expert happened to be reared. They are not necessarily universal truths.*

A foreman retires and there is need to appoint a new foreman. The superintendent offers the job to a qualified workman and is shocked when the promotion is declined. In the same way, a scientist may prefer the laboratory to the directorship; a professor may prefer the classroom to the deanship. It is stupid to accuse such men of "no ambition" because they elect to follow a way of life which is preferable to them.

2. *The culture of the line supervisor serves him well by providing him with precedent, practices, and explanations. These things, however unenlightened, have the advantage of predictability and thus assure, to some degree, peace of mind. The more the staff specialist recognizes the real values this culture has for the line supervisor (instead of disparaging it as "ignorance," "stubbornness," "too-old-to-learn," etc.) the better will he be able to prepare his case.*

An accountant worked up a financial report to improve control of the inventory of copper rod. The rolling mill superintendent never read the report. Instead, he continued to rely on two stripes painted on the wall of the storage shed. Years ago he had given the foreman orders to keep the pile of stored rod high enough to cover the lower stripe, but not so high as to cover the upper one. By this method, he was able to review the inventory situation at a glance on his daily trip through the shop. The system had never failed, and the varying price of copper had never bothered him. Had the accountant translated his report into suggested changes in the height of the paint stripes, he might have gotten somewhere.

3. *The staff specialist should examine his proposals from the viewpoint of the line supervisor, since that is what the latter is bound to do anyhow.*

A manufacturing engineer, under pressure to reduce manufacturing costs, concluded, after studying competitors' products, that his own company's specifications were needlessly tight and thus not competitive. He then proposed to the manufacturing vice president that a joint study be undertaken by the manufacturing, sales, and engineering departments to confirm or deny this conclusion. Despite the engineer's evidence, the manufacturing vice president rejected the idea because manufacturing performance was currently under fire from the president. The manufacturing vice president felt that before he could make such a proposal (which could be construed as muddying the water) he would first have to solve some of the more purely manufacturing troubles.

4. *The staff specialist must avoid the temptation to deal with a localized problem through a sweeping master plan which goes far beyond immediate needs. If he urges the*

sweeping plan, he risks rejection of the entire proposal, including the solution to the localized problem as well.

A procedures analyst was assigned the job of working up a plan for delegating approval of purchase orders. The company was ready for such a plan, and the analyst put together a good one. However, he succumbed to the temptation of extending it to cover the delegation of authority for approval of capital expenditure projects also. The climate was not right for securing action on the latter. As a result, his plan for purchase orders lost out too.

5. *Unless the line supervisor is genuinely convinced that the change should be made, he is likely to return to his old ways rather than endure the tensions of frustrations brought about by the change.*

A staff quality-control engineer succeeded in convening a meeting of company executives to hear him out. He put on an entertaining, convincing display, using pin-ball machinery, dice games, charts, etc., and aroused a highly favorable reaction among the executives. The plant superintendent honestly didn't understand what the engineer was driving at. However, he was unwilling to get in the way of anything which had so favorably impressed top management. The engineer went to work but, swept away by his own enthusiasm, he spent his energies devising numerous charts which had little relation to the actual problems faced by the shop. The shop faced many real quality troubles which required diagnosis and solution through a variety of remedies. The engineer had only one remedy and was trying to apply it to all the company's troubles. Within two years, the charts had fallen into disuse and the whole program was discredited. All that was left was widespread confusion and irritation in the shop.

The tensions and frustrations brought about by change may lead to a variety of unwelcome consequences:

(a) Return to former practices, less satisfactory though they are.
(b) Immature, even childish, behavior.
(c) General belligerence, verbal attacks, anger.
(d) Substitute outlets for energies—alcohol, gambling.
(e) Flight from reality in the form of blaming others, chronic bad health, etc.

A change may make old, valued habits obsolete, may deny what a man has been saying for years. It is not difficult to understand why the UNESCO report approaches frustration as a mental health problem.

What Acceptance of Change Involves

How, then, can technical changes be made acceptable? Logical explanation alone is not the answer, since this is no substitute for the emotional satisfactions of the present order. Criticism of the existing order is even worse. It is an attack on long-standing beliefs and thus an attack on the believer. A staff specialist giving vent to such criticism makes himself disliked and renders himself ineffective no matter how meritorious his proposals may be technically.

Accepting technical change involves two activities for the learners:

(a) *Unlearning* old habits, attitudes, beliefs.

(b) *Learning* the new.

Unlearning the old, a painful process at best, is made easier by clothing the new learning in familiar dress, so that there is no chasm to cross—only small fissures.

For example, a company sold its goods in a market which gave price differentials in favor of "wholesalers" over "retailers." However, the wholesalers' original functions (buying in quantity, and breaking bulk) were no longer being performed. Yet the price differential was being maintained after the reason for it had disappeared. Direct learning of this fact of life was difficult. The company's sales executives found it hard to accept this new situation in actuality, even though they had no answer to the logic. It was necessary to teach them indirectly, by computing their costs of selling to the two kinds of customers. In the same way, the military in World War II had great difficulty in dealing with civilian consultants until the device of "simulated rank" was adopted. In a culture as rank-conscious as the army, this simplified contacts greatly.

Learning the new is encouraged by "consistent, prompt attachment of some form of satisfaction." The forms of satisfaction are familiar enough—praise, approval, increased status, sense of participation, material reward.[5]

Stress is laid on the satisfaction of learning a new skill, of belonging to a particular social group. Moreover, the learning must be by actual doing, by experiencing, by "living through a long series of situations in which the new behavior is made highly satisfying—without exception if possible—and the old not satisfying."

[5] Those who place stress on a high material standard of living are due for a shock here. The anthropologists point to many peoples who work only to meet immediate needs, and to many cultures in which the habit of "working," as Western society defines it, is not considered a virtue.

Analyzing the Pattern of Behavior

"One of the necessary tools of the expert . . . is some way of analyzing the traditional behavior, so as to be able to estimate just where the changes are going to fall, which habits are going to change, which beliefs are going to be threatened, which attitudes will have to be altered."[6]

The analysis of traditional behavior requires a study and an understanding of the customary pattern of life. This study should be long enough in time to include weekends as well as work days. It should be wide enough in scope to embrace activities off the job as well as those on the job. It should disclose not only the activities of individuals when alone, but also the activities of the group.

As this pattern of behavior becomes known, each change under consideration can then be examined as to its likely effect on the pattern.

A company needs to expand the chemical laboratory, and puts up a new building on part of the parking lot. The displaced cars must find parking space on the overcrowded public streets. Men have to leave home earlier to find a place to park. Their wives and children have to adapt themselves to this new routine. New car pools are formed, creating some fresh social groupings, tearing others apart. Wide waves of disturbance be-

[6] *Op. cit.*, p. 280.

gin to spread from so innocent a beginning as the need to relieve the congestion in the chemical laboratory.

Another example can be drawn from a common problem in human relations. A plant industrial engineering staff works up a plan for putting the production workers on piecework. Painstakingly, they debate numerous questions of methods, standards, pay scales. But as the date for introducing the change approaches, there is a protest from the maintenance trades, who are not even involved. They point out that there has always been a difference in pay between production and maintenance workers; the proposed change will close the traditional gap, and something will have to be done for the maintenance people to retain the old relationship.

Recommendations

Some of the recommendations of the UNESCO report are thoroughly familiar to industry. Others are only occasionally followed, while some are virtually unknown.

1. *Secure the active participation of those who will be affected, both in the planning and in the execution of a change.*

The current wave of interest in industrial "communication" includes this principle.

2. *The planning should include participation not only by the advocates and by those who will be affected; the planning should also include third parties who can supply balance and objectivity.*

As yet, industry has made little use of this idea.

3. *Strip off all technical cultural baggage not strictly needed for introducing the change.*

There have been numerous violations of this principle in industry. An accountant assigned to work up a company training course in cost control may want to "lay a foundation" of general and cost accounting. Personnel people have urged courses in psychology as essential supervisory training background for a company venture into employee testing. The recent insistence of many quality-control specialists on supervisory training courses in statistics, and the current emphasis by operations research specialists on mathematical tools are of the same order. The situation was well summed up by one harassed supervisor: "If education is that painful, I prefer to remain ignorant."

4. *When the long-standing habits of the line are used as a vehicle for introducing change, such use should be planned and applied by a member of the line who is sold on the change.*

This is another way of saying that only the line people know the habits of the line. But involved here is also a useful hint on where the staff leaves off and the line takes up.

5. *Reduce the impact of changes by weaving them into an existing broader pattern of behavior, or by letting them ride in on the back of some acceptable change.*

A company was in customer trouble because of broken delivery promises. When the staff people recommended a more centralized production control function, the departmental production control men argued against the change. Seeing trouble ahead, the staff people made it their business to include in

their plan remedies for some long-standing needs of the production control department, such as increased clerical assistance, improved paperwork, and mechanical aids. That did it.

6. *Put yourself in the other fellow's place.*

Any individual derives his attitude toward change from *his own* point of view, not from the view of the proponent of change.

An American visiting in England proposed to a British firm of silversmiths that they explore getting around the American import duty on finished silverware by bringing American-owned silver into England, performing their operations, and shipping the finished goods back duty-free. The immediate reaction of the British firm was to reject the idea. The rejection had nothing to do with import technicalities; it was based on the fact that in England a silversmith company that works on silver it does not own occupies a much lower social status than a company that owns the silver it fabricates. (A similar caste distinction prevails in American industry generally, as between prime contractor and subcontractor, or between manufacturing companies and manufacturing service companies.)

It is when the proponent of change runs into seeming blind opposition (you gotta have north light; the blue grinding wheels cut better; we tried plastic handles years ago and they didn't work, etc.) that he must move most cautiously. "Blind opposition" is how it looks to the staff man. It may only mean that the staff man has failed to grasp the situation as viewed by the line.

7. *Make use of the wide variety of methods available for dealing with resistance to change.*

There are many ways of overcoming resistance to change. You may:

(a) Try persuasion to secure change. Much depends here on the extent of prior participation and on the extent to which the individual is *treated with dignity.*

In one company, an important executive was in the habit of using new ideas, especially those suggested by employees, as a basis for taunting supervisors with the question, "How is it that you didn't think of this during all these years?" The result was a "freeze" by supervisors to all proposals for change, employee suggestions or otherwise.

Then someone went to work on the important executive and convinced him that he was doing a lot of damage. He revised his policy and began to "accentuate the positive," holding up as good examples those supervisors who showed improvements through change. Within a year, the supervisory freeze had fully thawed out.

(b) Change the environment in a way which makes it easy for the individual to change his point of view.

Company X contemplated putting up a new hosiery mill in a Southern community. Conditions were generally favorable. However, the past record of industrial companies in the community had been unenlightened. In consequence, factory work was low in the social scale, and candidates for factory work contained a high percentage of undesirables.

The company not only put up a modern air-conditioned factory build-

ing; they provided a handsome recreation room and permitted employees to use it out of hours for social events. Because this recreation room was the best facility of its kind in the area, it became an important social center in the community. The employees of Company X, far from being under the social stigma of factory workers, were looked up to because of the high standing which the company had earned in the community. As a result, Company X enjoyed a wide choice of candidates for employment.

(c) Remedy the causes of the line man's resistance.

In the early days of the study of industrial accidents, injuries caused by dropping something on the foot stood high on the list. The safety shoe was developed as a protective device. Safety directors had ample data and logic on their side to demonstrate the value of the shoes. Yet workmen turned them down, primarily because of their strange appearance. When the safety shoe was redesigned so that it looked much like a dress shoe, worker acceptance increased markedly.

(d) Create a social climate which favors the new habits.

A familiar example is the stimulation of patriotic feeling during a war. In industry, it may be observed when group incentives replace individual incentives. The machinist no longer stands by waiting for the craneman to finish; he is now willing to help the craneman who, for his part, is now less likely to enforce jurisdictional boundaries. A similar situation develops between functional divisions when a company decentralizes into product divisions. A new spirit of collaboration arises because the social climate demands it.

This social climate includes specific recognition, e.g., service pins, which bestow dignity and status on career employees. The awards for safety, housekeeping, etc., fall into the same category.

(e) Provide sufficient *time* for mental changes to take place.

This vital rule is often violated and needlessly. There are numerous ways of applying it. For example, in suggesting changes, propose distant effective dates to allow time for all to become familiar with the idea before being subject to the change itself. If a proposed change is rejected, let some time pass before bringing the subject up again.

The importance of *time as an ingredient of change* is well known to the chemist, the politician, and many others. The industrial staff man needs to grasp this principle firmly.

(f) Start small and keep it fluid.

To protect both the staff and line man, the unexpected should be provided for. Change should be introduced slowly and gradually, so that, if necessary, the original plan may be modified as experience dictates.

Industry uses this principle extensively. The pilot plant, the test town, the trial period are all means of trying out on a small scale, and of learning at little risk, before taking the big plunge.

8. *No surprises.*

One of the main reasons why a culture develops is that it makes life predictable. It is true that even an established culture includes patterns of change, e.g., progression from appren-

tice to journeyman, the annual model, periodic collective bargaining. But the type and pace of these changes are also predictable in the established culture.

It is the unexpected change—the one that defies explanation—which breeds chaos, and drives the individual to find a way to relieve his tension.

This rule of no surprise is closely related to the rule of providing enough time for mental changes to take place.

9. *Provide a measure of effectiveness.*

The success with which a change has been introduced is measured by the extent to which it is accepted as part of the way of life of the people who are affected by it. To measure the extent of acceptance, and to reduce the risk of relapsing into the old ways, standards should be set up. These can be a goal to the line, and enable it to judge progress.

While industry often provides for the measurement of results (cost, quality, service) it does little to provide for measuring the rate at which changes are accepted, and the permanence of this acceptance.

10. *Treat people with dignity.*

Technical change may appear to be concerned solely with things. However, technical change has much impact on people, whose dignity as persons must be respected.

The classic example in industrial history is the Hawthorne experiments. A test room was created to study the effect of illumination on factory work. The assemblers in the test room considerably outperformed the assemblers in the regular department. However, no reason for this could be found in the variations in illumination. The superior performance of the handful of test-room operators was found to stem from the new sense of importance they felt.

Conclusion

The UNESCO experiences make it clear that cultural patterns are a vital factor in resistance to technical change, and that there are established ways for the technical expert to deal successfully with these cultural patterns.

These same experiences and solutions have direct application to the industrial problems of the staff and line relationship. In fact, the universal nature of the principles involved suggests their adoption as training material for business schools, executive training programs, and company training programs generally.

SPECIAL CONFERENCE AND SEMINAR

A Special AMA Conference, "Integrating Management's Public Relations and Industrial Relations Functions," will be held at Colgate University, Hamilton, New York, on Monday and Tuesday, July 23-24, and will be followed by a Workshop Seminar for the remainder of the week (July 25-27). Attendance at the Seminar is limited to Conference participants, but registration may be made for the Conference only.

. . . Some employees quit on the spur of the moment, others may make up their minds to resign and linger for months before they finally leave. In any organization, at any given time, there are likely to be more prospective quits than management realizes.

When the Employee Decides to Quit

WAYNE L. McNAUGHTON

University of California at Los Angeles

IN THE COURSE of an extensive study of employee turnover in a large aircraft company of 10,000 employees, certain facts emerged which shed some interesting light on the intentions and characteristics of employees who have made up their minds to resign. Though the company does not wish to reveal its identity, it has granted permission for the publication of the findings of this part of the study.

The Problem

It is known that the behavior of employees who have decided to quit contributes to the hidden costs of employee turnover. Such employees no longer identify themselves with the firm; hence, they tend to "let down," daydream, and no longer expend creative imagination and enthusiasm on their jobs. This tends to be true whether the employee bears good will or ill will toward the company. However, the employee-about-to-quit who bears a grudge toward the company or its supervisors is a real menace. He pours his real and imagined grievances into the ears of his co-workers with the result that morale sags and other employees become convinced that they, too, might well seek greener pastures elsewhere.

Some idea of the extent to which the company studied was affected by the problem can be seen from the fact that, for the year studied, there were about 5,600 separations from an average force of approximately 10,000. About 5,000 of these were voluntary terminations, each of whom remained on the payroll an average of 31 calendar days after deciding to quit. This means that, at all times during the period investigated, one employee out of 24, on the average, had decided to leave the firm.

How many employees does your

TABLE 1

Time Lags Between Decision to Quit and Termination

TIME LAG	NUMBER OF EMPLOYEES	PER CENT
One day or less	104	23
1 day to 1 week	28	6
1 week to 2 weeks	60	13
2 weeks to 3 weeks	101	23
3 weeks to 1 month	26	6
1 month to 2 months	72	16
2 months to 3 months	25	6
3 months to 4 months	7	2
4 months to 5 months	1	—
Over 5 months	23	5
Totals	447	100

company have who have decided to resign? How long will they remain before they actually quit? Are they young people or old, low- or high-paid, married or single, men or women; and do they really have that new job they have been talking about so much?

The Sample

For the purposes of this aspect of the study, questionnaires were mailed to every ex-employee who had quit the company during alternate months in the year ending May, 1952. The sample of replies is considered to be adequate and representative of such categories as wage groups, age groups, reasons given for leaving, the sexes, and residence status. Only those questionnaires were tabulated which were submitted by ex-employees who had expected to make a career with the firm. Those who intended to remain temporarily, those whose answers indicated that they were "floaters," and those who did not fully answer the pertinent questions, were not included. This left 447 usable questionnaires.

A general breakdown of the time lags between the decision to quit and actual separation is shown in Table 1, from which it will be seen that the highest percentages were accounted for by those who quit on impulse and those who stayed on for from two to three weeks. A sizable proportion of employees remained for one to two months and a slightly smaller proportion for one to two weeks. The individual percentages for the other periods shown in the breakdown were relatively insignificant.

Marital Status and Sex

A breakdown of time lags by marital status and sex is given in Table 2. As might be expected, it shows a higher percentage of impulse quitting among single people than among married.

Although proportionably more single employees than married stayed

on for more than two months, the pattern indicates that married people tended to remain longer than unmarried. If we accumulate the figures upward we see that 44.5 per cent of the single employees remained more than two weeks as compared with 62.5 per cent of the married employees.

Though men and women quit on impulse in equal proportions, at any given time a greater proportion of women than men had decided to leave. Put in another way, women tended to stay longer after making up their minds to quit.

While there was the same proportion of impulse quitting among the single men and single women, the proportion of single men who stayed more than two months was less than half that of the single women.

Married men quit on impulse less than married women. There was a tendency for married women either to quit immediately or to stay a long time. Among those who stayed from two days to one month there was a greater percentage of married men (58) than married women (41).

Impulse quitting was greater among single women than among married, but at the other end of the scale, proportionately twice as many single women stayed over two months as did the married ones.

While the proportion of men who thought about leaving for two to three weeks was the same as for those who quit on impulse, the largest segment of married men stayed on from two to three weeks, and the highest proportion of single men quit on impulse.

Although the same percentage of single and married men remained over two months, cumulative figures for the shorter periods show that married men consistently remained longer. Thus, 23 per cent of the single men remained more than one month as compared with 25 per cent of married men; 27 per cent of the single men remained more than three weeks as compared with 33 per cent of married men, and so on.

Wage and Age Groups

For purposes of analysis, the entire range of the company's wages and

TABLE 2

Time Lags Between Decision to Quit and Termination By Marital Status and Sex

Time Lag	Men			Women			All		
	Single N=129	*Married* N=185	*All* N=314	*Single* N=18	*Married* N=115	*All* N=133	*Single* N=147	*Married* N=300	*All* N=447
One day or less	33%	17%	23%	33%	22%	23%	33%	19%	23%
2 days to 1 wk.	5	8	7	6	5	5	5.5	7	6
1 wk. to 2 wks.	18	15	16	11	6.5	7	17	11.5	13
2 wks. to 3 wks.	17	27	23	11	23	22	16	25.5	23
3 wks. to 1 mo.	4	8	6	0	6.5	5	3.5	7	6
1 mo. to 2 mos.	12	14	13	11	23	22	12	18	16
Over 2 mos.	11	11	11	28	14	16	13	12	13

TABLE 3

Time Lags Between Decision to Quit and Termination By Wage Groups

	Wage Groups				
Time Lag	*Lowest Fifth* $N=297$	*Next Lowest Fifth* $N=99$	*Middle Fifth* $N=51$	*Upper Two-Fifths* $N=0$	*All* $N=447$
One day or less	27%	19.5%	12%	—	23%
2 days to 1 wk.	6	6	8	—	6
1 wk. to 2 wks.	12	19.5	8	—	13
2 wks. to 3 wks.	22	18	35	—	23
3 wks. to 1 mo.	5	8	10	—	6
1 mo. to 2 mos.	15	18	13.5	—	16
Over 2 mos.	13	11	13.5	—	13

salaries was divided into five equal brackets. Of all quits during the period studied, 66.5 per cent were in the lowest pay bracket, though only 47.5 per cent of all employees on the payroll were in this range. Twenty-two per cent of the quits and 29.5 per cent of all employees were in the next to lowest pay bracket, and 11.5 per cent of the quits and 22 per cent of all employees were in the middle bracket. There were no quits from the upper two brackets, which covered 1 per cent of all employees.

Table 3 provides a breakdown of time lags by wage groups. It is interesting to note that the highest percentage of impulse quitting was found in the lowest income bracket, and that, as income increased, impulse quitting decreased. Aside from those who quit on impulse, most employees in the lowest income bracket left within two to three weeks after deciding to quit and most of those in the next to lowest bracket left within one to two weeks. By far the largest number of employees in the middle bracket left from two to three weeks after making up their minds to go.

When the time lags were studied by age groups (Table 4), it was found that most teenagers either quit on impulse or tended to take their time. Proportionately, nearly as many of the under-20 group stayed on from three weeks to over two months as did those who acted on the decision to leave the same day.

Most employees in their twenties tended to quit on impulse, though an almost equal proportion quit after two to three weeks.

Of the employees in their thirties, roughly the same proportion quit on impulse as quit after two to three weeks and from one to two months.

By far the greatest proportion of employees in their forties quit within two to three weeks after deciding to leave. The second largest group were impulse quitters.

Employees over 50 also quit in greatest numbers two to three weeks after deciding. The second largest group waited for one to two months and relatively few quit on impulse.

Impulse Quitting

A study was made of those who left the same day they decided to quit, to determine their reasons. Mostly, these were the younger men, and their paramount reason was to join the armed forces. Some of these men received draft notices and decided not to go back to work, while others suddenly decided to enlist. Illness and accidents to employees accounted for 18 per cent of sudden quits, while illness, accidents, and death involving members of employees' families accounted for 13 per cent. Inability or unwillingness to change shifts, and job dissatisfaction each accounted for 6 per cent.

Those who quit on impulse were divided into two groups for further investigation: Those who had a new job before quitting and those who did not. Of the 104 impulse quitters, 45 per cent had new jobs before leaving. Of these 61 per cent were drafted, or expected to be drafted, into the armed services. Nine per cent left because of bad supervision, 7 per cent because they were needed on the family farm, and the same proportion because they were not making enough money.

Of those who quit without new jobs, 26 per cent did so because of illness, injury, or poor health; 19 per cent left because of illness, injury, or death in their families; and 8 per cent each because of transportation troubles, undesirable shift assignments, and general job dissatisfaction.

Resignee's Job Prospects

To what extent did employees leave the company before they had other jobs? As may be seen from Table 5, almost one-half left without having a new job lined up elsewhere.

Surprisingly enough, more than half

TABLE 4

Time Lags Between Decision to Quit and Termination By Age Groups

Time Lag	Age Groups					
	Under 20 N=47	*20 to 29* N=200	*30 to 39* N=107	*40 to 49* N=46	*50 and over* N=47	*All* N=447
One day or less	36%	24%	19.5%	24%	15%	23%
2 days to 1 wk.	8.5	4.5	7	6.5	11	6
1 wk. to 2 wks.	8.5	15	14	8	15	13
2 wks. to 3 wks.	13	21	20	37	32	23
3 wks. to 1 mo.	4	4.5	8	9	6	6
1 mo. to 2 mos.	15	16	20.5	4.5	17	16
Over 2 mos.	15	15	11	11	4	13

TABLE 5

Job Status at Separation
By Marital Status and Sex

Job Status	Men			Women			All	All	
	Single N=129	*Married* N=185	*All* N=314	*Single* N=18	*Married* N=115	*All* N=133	*Single* N=147	*Married* N=300	*All* N=447
Had a job	67%	65%	66%	17%	16%	16%	61%	46%	51%
Did not have a job	33	35	34	83	84	84	39	54	49

the married employees were in this position. Since married people are generally assumed to have greater responsibilities, this finding is somewhat startling. In part, however, as Table 5 shows, it is accounted for by the tendency of women, irrespective of marital status, to quit first and look for new jobs later: Over 80 per cent of all the women employees had no other jobs in view. On the other hand, only one-third of the men quit without new jobs, though here again the proportion of married men was slightly higher than that of the single ones. It appears, then, that the sex of the employee is a more important determining factor in turnover than marital status. Men (whether married or single) seem to be more cautious than women about leaving their jobs without a new one to go to. However, it should be pointed out that many of the women left to take up responsibilities which were not classified as "jobs," such as marriage and homemaking, caring for sick or injured members of their families, and bearing children. The surprising fact brought out by this study is that so great a proportion of married men should leave without new jobs.

From Table 6, where it may be seen that over one-half of those in the lowest income bracket did not have new jobs as compared with under one-

TABLE 6

Job Status at Separation
By Wage Groups

Job Status	Wage Groups				
	Lowest Fifth N=297	*Next Lowest Fifth* N=99	*Middle Fifth* N=51	*Upper Two Fifths* N=0	*All* N=447
Had a job	45%	60%	69%	—	51%
Did not have a job	55	40	31	—	49

third in the middle bracket, it appears that the lower the income, the greater is the likelihood that the employee will quit without having other employment.

The relationship between age and job prospects is set forth in Table 7, from which it will be noted that the proportions of those who quit without new jobs tended to increase with age.

The relatively low percentage of teenagers who quit without having new jobs can be explained by the fact that many of these younger people were drafted. If those who went into the armed services are left out of account, the percentage of employees in this age group who left without new jobs jumps to 72. So far as the twenties and thirties were concerned, the proportions for both groups were almost identical. The noticeable jump in the next group apparently reflects to some degree the increased difficulty experienced by people over 40 in obtaining jobs. It reflects, also, the increasing numbers of employees who must quit for reasons attributable to advancing age. However, this factor appears to be of minor importance in view of the fact that those over 50 showed only a slightly increased tendency to leave without a new job.

Table 8 shows how the time lags before actual termination varied between those who had a job before quitting and those who did not. Over half the impulse quitters did not have another job lined up. Rather more than one-third of those who waited for three weeks to a month were in the same situation, a percentage that rose for the groups who waited longer. It is understandable that some employees might leave on the spur of the moment without another job, but it is difficult to see how a person can decide to quit, wait a month or more, and then leave without a new job. Yet, of the employees who waited more than a month before quitting, a little over one-half did not have other jobs when they finally left.

Some Implications for Management

As a result of the broader study, of which—as was explained—the findings reported here form only a part, the company has instituted a number of changes in policy. Supervisory

TABLE 7

Job Status at Separation
By Age Groups

	Age Groups					
Job Status	*Under 20* N=47	*20 to 29* N=200	*30 to 39* N=107	*40 to 49* N=46	*50 and over* N=47	*All* N=447
Had a job	68%	52%	51%	41%	40%	51%
Did not have a job	32	48	49	59	60	49

TABLE 8

Job Status at Separation
By Time Lags Between Decision and Termination

JOB STATUS	TIME LAGS							
	1 day $N=104$	*2 days to 1 wk.* $N=28$	*1 wk. to 2 wks.* $N=60$	*2 wks. to 3 wks.* $N=101$	*3 wks. to 1 mo.* $N=26$	*1 mo. to 2 mos.* $N=72$	*2 mos. and over* $N=56$	*All* $N=447$
Had a job	43%	50%	57%	55%	62%	50%	48%	51%
Did not have a job	57	50	43	45	38	50	52	49

training has been stepped up, many jobs have been reclassified, the pay scale has been modified, and for the first time ex-employees are being considered as a source of recruits for vacancies. More attention is being directed toward preventive measures, and systematic attempts are now being made to salvage employees who seem bent on leaving.

In general, it may be said that a study of this kind can do much not only to heighten awareness of the number of probable quitters on the payroll but also to indicate ways and means of preventing the individual employee's decision to leave from turning into an actual termination. Armed with facts along the lines reported in this study, exit interviewers should be in a better position to slow down the stream of separations and, if nothing else, to plant seeds of good will in the minds of those who cannot be persuaded to stay.

Though it cannot be claimed that the specific findings of this study are representative of industry generally, they focus attention on one aspect of the problem that suggests many possibilities for remedial action—the apparently large number of employees who leave without another job in view. It may fairly be assumed that in many of these cases the employee can be induced to change his mind, if steps are taken to remedy the underlying causes of his decision.

Strike Back—Give to Conquer Cancer!

. . . Does the company paying the highest wages also pay more in fringe benefits? Though this relationship is often assumed, it is not borne out by the findings of the study reported here.

Fringe Benefits: Are They Related to Wage Rates?

VIRGIL C. CRISAFULLI and SIDNEY C. SUFRIN*

THE BUSINESS MAN, the trade union leader, the public administrator, and the economist have all had to learn to adjust their thinking on wages to include elusive, ephemeral notions of fringe benefits. To arrive at some workable concept of market or going wages, it is essential to take fringe benefits into account, since not only do base wages of different companies vary, but the same benefits are not characteristic of all or even the majority of firms in any single labor market.

There is a feeling that companies paying higher base wages also tend to pay more valuable fringe benefits. Since these higher-paying companies are usually the larger ones in the market, it is a working hypothesis that large companies pay more in fringe benefits than smaller ones. If this is true, it follows that a comparison of base rates in a given labor market would not present a true picture of the distribution of wages in the area, since the inclusion of fringe items would raise the gross pay of employees in the lower-wage companies by a smaller amount than it would raise the gross pay of the higher-paying concerns. Thus base rates would tend, on the net, to underestimate the dispersion of wages paid by different companies in a particular labor market.

This point of view has been expressed by Professor Robert L. Raimon:[1]

[1] "Sources of Wage Data," *Proceedings of the Sixth Annual Meeting of the Industrial Relations Research Association*, Washington, D. C., December, 1953, p. 264.

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To date, about the only generalizations forthcoming in this field are that fringe benefits are increasing in importance to employers and to unions, and that high-wage companies seem to offer more liberal non-wage aspects of employment (congeniality of the work situation aside) than do low-wage companies. Hence, surveys of only money wages tend to understate the relative attractiveness of conditions of employment.

An alternative hypothesis (logical if not empirical) is that fringe benefits are a compensatory factor where wages are lower than the market rate. Thus it may be assumed that a firm whose base pay tends to be low in comparison with its competitors makes up the difference with fringe payments. Schools, hospitals, and government agencies sometimes act as if this were a factor in their wage policies.

Measurable and Non-measurable Terms of Employment

Regardless of the hypothesis chosen, one of the functions of fringe benefits *is* to supplement base wages and so provide an attraction for people to work at a particular plant. Clearly, all the attractions that a plant holds out to employees cannot be measured in terms of money. Its physical layout and cleanliness, its distance from the employee's home, its reputation in the community, the nature of its supervision—all these, along with a number of other significant factors, defy measurement by the yardstick of dollars and cents. Yet they are part of the general or total job attractiveness. The terms of employment which attract the employee to work in a given plant can be reduced to five categories:

1. The basic money rate or earnings.
2. Monetary fringe benefits.
3. Fringe benefits which are convertible to monetary value.
4. Non-monetary fringe benefits.
5. Non-wage terms of employment.

The first category, basic money wage rates, clearly includes the bulk of take-home pay. The second, the fringe benefits that are measurable in monetary terms, includes such conventional items as paid holidays, vacations, shift differentials, etc. The third, non-monetary fringe benefits which may be converted to a monetary value, includes such things as free medical care, free food or refreshment, uniforms and work clothing, paid clean-up time, rest periods, special tools, etc. The fourth and fifth categories include the innumerable factors which make one job better than another insofar as the employee is concerned. While these may be important in determining where an employee may seek a job, they do not lend themselves to any straightforward statistical analysis.

This paper is concerned with analyzing, for a given labor market, the fringe benefits that are reducible to monetary value, i.e., categories 2 and 3 above. The basic data were obtained from 15 firms in the Mohawk Valley in the Utica-Rome area. This area has a population of over a quarter of a million people, of whom more than 100,000 are in the labor force. About 40 per cent of the labor force are employed in manufacturing. The area, while depressed as compared with the high prosperity of upper New York State or the United States as a whole, is nevertheless diversified from an industrial point of view.

TABLE 1

Value[a] Per Man-Hour of Fringe Benefits, in 15 Manufacturing Companies, Utica-Rome Labor Market Area, 1953

Company	Total All Shifts	Straight-time Value of			Overtime & Shift Earnings
		Paid Holidays	Paid Vacations	Welfare Benefits	
A	$0.184[b]	$0.040	$0.066	$0.054	$0.020
B	0.207[c]	0.031	0.054	0.012	0.110
C	0.196[c]	0.035	0.058	0.036	0.067
D	0.393[d]	0.030	0.059	0.030	0.230
E	0.244[e,c]	0.047	0.036	0.030	0.123
F	0.264[f]	0.036	0.072	0.105	0.040
G	0.225	0.050	0.109	0.056	0.010
H	0.280[c]	0.057	0.087	0.016	0.120
I	0.182	0.034	0.068	0.029	0.051
J	0.145	0.037	0.063	0.025	0.020
K	0.522	0.032	0.058	0.045	0.380
L	0.188	0.038	0.073	0.057	0.020
M	0.185[b]	0.039	0.042	0.030	0.070
N	0.299[c,g]	0.054	0.038	0.026	0.102
O	0.150	0.034	0.053	0.033	0.030

[a] All computations are based on an 8-hour day, a 2,000-hour year, and average straight-time hourly earnings in the case of paid holidays, vacations, and percentage-type shift differential. Value of paid vacations is based on average seniority.

[b] Includes $0.004 per-hour value of non-production bonus (a Christmas ham).

[c] The rate of differential is 10 per cent.

[d] Includes $0.044 per-hour value of non-production bonus (attendance bonus).

[e] Includes $0.008 per-hour value of non-production bonus (stock purchase plan).

[f] Includes $0.011 per-hour value of food discount in company cafeteria.

[g] Includes $0.009 per-hour value of medical services.

On the whole, wages in the area tend to be slightly lower than in other, more prosperous industrial sections of upstate New York.

The Study's Findings

The 15 firms covered by the survey were randomly chosen and represent a cross section of industrial activity in the area. All told, they employ nearly 8,000 production workers.

The data obtained covered: (1) paid holidays; (2) paid vacations; (3) non-production bonuses; (4) free goods and services; (5) employee welfare benefits; and (6) shift differentials. As shown in Table 1, the gross value of each company's total benefits was averaged on a per-man-hour basis. The average for each category was then reduced to a value per man-hour by assuming that every employee worked an eight-hour day, and a total of 2,000 hours a year.

Certain items, such as non-production bonuses, food discounts, etc., did not occur often enough to list them in a separate column in this table. The value of such benefits reduced to a man-hour basis has been included in the total, and indicated in an appropriate footnote. Where a service is given as the fringe benefit, e.g., insurance and welfare plans, the costs to the firm in question have been averaged for the number of employees.

As may be seen, the total value of the fringe benefits paid by the 15 companies shows considerable variation, ranging from $0.145 an hour to over $0.52 an hour. Though, in most cases, overtime and shift earnings represent the largest single item in the over-all value of fringe benefits, paid vacations, holidays, and welfare benefits make up a considerable proportion of the total. In other words, while overtime and shift earnings are significant items, they are not the major factor in determining the total value of the fringe benefits paid by a company.

Here, it may be pointed out that overtime payments differ from the general run of fringe benefits in that they cannot be estimated in advance, but depend, in great part, upon the exigencies of business and unpredictable changes in both the labor market and the manufacturer's selling market.

The median value of the 15 companies' fringe benefits was $0.207. In Company J, which paid the lowest benefits in terms of man-hour value ($0.145), the total expenditure represented 9.3 per cent of the plant's average base-pay rate. In Company K, the top-ranking firm, the $0.522 paid in man-hour fringe benefits represented 46.3 per cent of the basic hourly rate. Further, as may be seen from Table 2, though Company K paid the highest fringe benefits, it had the lowest base rate reported by the 15 firms. On the other hand, Company J was a concern, generally speaking, of central tendency, ranking tenth in the listing of firms from the highest base rate to the lowest.

Relationship Between Wages and Benefits

Further examination of Table 2 shows that there is no obvious relationship between fringe benefits and the level of basic wage rates. To test the relationship between straight-time earnings and fringe benefits more objectively and scientifically, a rank correlation was computed between the ranking of firms in accordance with their straight-time earnings, and their ranking in terms of straight-time earnings plus fringe benefits. This correlation resulted in an index of +0.954, which is extremely high. It shows that the addition of fringe benefits to straight-time earnings (an approximation of "base pay") has almost no effect in changing company ranking according to average base hourly pay (or hourly straight-time earnings) levels. In other words, rank order remains approximately the same with or without fringe benefits. Therefore, the competitive relationship between companies is scarcely altered by the fringe benefits they pay, insofar as their attractiveness to labor is concerned. This statement, of course, must be considered in the context of

TABLE 2

Relationship of Fringe Benefits, Average Straight-time Earnings, and Numbers of Hourly Rated Workers in 15 Manufacturing Companies, Utica-Rome Labor Market Area, 1953

Company	Straight-time Earnings		Fringe Benefits		Number of Hourly Rated Workers	
	Amount	*Rank*	*Amount*	*Rank*	*Number*	*Rank*
K	$1.127	15	$0.522	1	85	14
D	1.310	14	0.393	2	96	13
O	1.400	13	0.150	14	530	5
C	1.442	12	0.196	9	459	7
B	1.530	11	0.207	8	260	11
J	1.550	10	0.145	15	61	15
L	1.590	9	0.188	10	518	6
M	1.615	8	0.185	11	1,223	2
A	1.620	7	0.184	12	300	10
I	1.636	6	0.182	13	369	8
E	1.659	5	0.244	5	881	4
F	1.660	4	0.264	4	117	12
G	1.809	3	0.225	7	1,151	3
N	1.910	2	0.229	6	1,617	1
H	2.020	1	0.280	3	315	9

monetary rather than non-monetary considerations, and as applying to the sample covered by this study.

Conversely, the correlation between the ranking of companies in accordance with straight-time earnings, on the one hand, and their fringe benefit payments on the other, resulted in an index of +0.10, which is small to the point of insignificance. This means that the ranking of companies in accordance with their wage policies (high or low) bears little, if any, relationship to their ranking according to their fringe benefit policies.

This conclusion does not accord with Professor Raimon's generalization that "high-wage companies seem to offer more liberal non-wage aspects of employment (congeniality of the work situation aside) than do low-wage companies." Admittedly, the data obtained from the present survey are limited to 15 companies in a rather depressed industrial market in 1953. Nevertheless, the results are sufficiently at variance with the generally, and perhaps uncritically, accepted conceptions about wage and fringe policies to warrant some doubt being cast upon the idea that the larger, better-paying companies also lead the parade in fringe benefits. Insofar as these data are concerned, the monetary value of fringe benefits may be almost randomly distributed, regardless of whether the companies are high-wage or low-wage concerns.

. . . With the current scarcity of high-caliber personnel, much more depends on the employment interview than it did in the days when there was no dearth of suitable applicants. On campus, interviewing poses a whole new set of problems.

Special Problems Of the Campus Interview

RICHARD G. KOPFF

Training Director
Koppers Company, Inc., Pittsburgh

THE INTERVIEW has traditionally been the principal means of gathering information about job applicants. It has been used as long as hiring itself has existed, and in all this time few doubts have ever been cast on its efficacy as a fact-finder and as a means of distinguishing between applicants who are likely to be successful and those who will probably prove unsuccessful. It has also served, in modern personnel practice, to acquaint the applicant with some idea of the responsibilities and possibilities of the position for which he is being considered, and to answer some of his questions about the job, the company, and its benefits and policies.

Roughly since World War II, however, the stepped-up demand for engineering and scientific graduates has had a profound effect on the interview as an instrument in college recruitment. The college interview now differs in six important respects from the usual run-of-the-mill personnel interview:

1. In the traditional interview an applicant is interviewed for a particular position or job ("job," here, being defined as a group of similar positions). In the average college interview of technical or scientific applicants, this specificity of job assignment is lacking. The college recruit, after being hired, is usually put through a period of training of one kind or another before being assigned to his first "permanent" position. As a general rule the interviewer will not know whether this particular applicant will do research, development, project engineering, process engineering, design, production work, test, service, sales, or any of the other functional applications of engineering or science.

2. To a greater extent than most applicants, the college engineer is ordinarily hired with an eye to his potential usefulness to the organization two, five, or even 10 or more years after hire. The recent college graduate is rarely, if ever, worth his initial salary, particularly at the rates now being offered. Potential usefulness is a prime consideration; immediate usefulness is minor or minimal.

3. The typical industrial interview is conducted in the plant or at an office, while college interviewing is conducted on-campus. This places unusual demands on the interviewer in the sense that many supporting supplementary aids are not available to him. For example, time and distance limit the number of interviewers who may be sent to any one college to screen applicants, and the interviewer is more completely left to his own resources.

4. Initial on-campus interviews customarily last only 20 minutes. This means first, that time is strictly budgeted, and second, that the time for interviewing is extremely short. The usual plant-type interview of professional personnel is not nearly so rigorously circumscribed.

5. The competition for recent scientific and engineering graduates has undoubtedly been more responsible than any other single factor for changing the character of the on-campus interview. Now it is not only the applicant who is being interviewed. The company representative himself is also being interviewed by the applicant. Interviewers must sell their company—the professional opportunities it offers, its training and development programs for newly hired personnel, its benefits, salary scale, and other factors of interest to applicants.

6. A final difference in campus interviewing lies in its seasonal nature, and in the relatively short period of time into which this type of activity is compressed. For June graduates, the most effective on-campus interviewing is usually conducted between February 1 and the spring vacation.

These differences between on-campus interviews and the ordinary personnel interview have raised some fundamental problems that have caused a revision in selection, placement, and employment procedures in industries that employ technical, engineering, and scientific personnel. Let us explain in more detail each of the six differences stated above, and note their effect on the interview and on some other related personnel practices.

Job Assignment Lacks Specificity

Traditionally, the specific requirements of a job should be available to an interviewer. He should be aware of not only the job requirements but also the predictors of success on the job, so that his interview may be patterned accordingly. The purpose of the interview is to ascertain information about the applicant, match this with the job requirements, and then determine whether or not this particular man is likely to be successful in filling this particular job. If there is more than one man for any one job, then it is the interviewer's function to determine the best-qualified man for it.

The practical factors involved in college recruiting today make such an approach very difficult. The average

college interviewer may have no idea of the *specific* job to which a particular interviewee may be assigned if he is hired. As a matter of fact, the modern training program is taking over the actual process of placement, and serves that purpose in addition to being an effective means of reducing turnover in the first few years of employment. If certain initial broad requirements can be fulfilled for hiring purposes, then the recruit's performance during the first year or two will largely determine his specific placement.

For one thing, most young graduates do not know themselves whether they will do better in research, or development, or plant engineering, or test, or service, or in some form of administrative or project engineering. And so far as sales is concerned, the complexity of many products and processes today may demand several years of actual plant or other type of engineering experience before anyone is equipped to sell. A technical or scientific graduate, then, is hired for potential usefulness in a position that cannot be specifically related to his presently observable traits. The job analysis is not very much help in this sort of situation.

Many of the functions in an engineering department, chemical lab, or processing plant that are allotted to recent college graduates can be performed more efficiently and more economically by a technician who has had considerably less training. Yet the young engineer or scientist actually needs such practical experience as a frame of reference for more advanced work. Every company has problems and procedures that are specific to it, perhaps for no other reason than historical accident, perhaps because of the complexity of the product or process itself. Especially in electronics and chemistry, new developments are coming along at such a rapid rate that the only way to learn about them at the present time is to work side by side with experienced personnel and to pick the work up as a type of job training. Customer demands, national security, and sometimes competition do not permit the orderly publishing of new findings in the traditional academic manner.

Difficulty of Assessing Potential Value

The engineers and scientists who are actually contributing to the development of new products and processes, who do the most creative work in product development, who are the most dynamic and productive project engineers, and who have the greatest facility in field testing and servicing are difficult to identify when they are college seniors. Valid and reliable predictors in these occupational groups are simply non-existent in a form that is useful to today's average college recruiter. Neither is the college record of much specific help, because industry uses different fundamental units of achievement measurement. Moreover, specialization in electronics and chemistry has now advanced to such a degree that these units of achievement measurement are specific to the industry, and sometimes to the company concerned. In other words, the specific environment in which a man works will determine how or even whether

his performance is adjudged good, bad, or indifferent.

All this adds up to the fact that the company itself will not know whether a man has been correctly placed or whether they have a good man for perhaps two years after they have hired him. This is not so much a poor application of psychology as an indication of the incredible rate at which technology is advancing and the fact that industrial psychology has not been able to keep pace.

For these reasons, a man's present and specific usefulness is not all-important to the college recruiter. Whether the applicant has the *potential* to make a contribution in two years or four years is perhaps a more important question. In some way or other, the recruiter tries to gauge this broad potential usefulness. In consequence, the training program has gradually been assuming new importance in the evolution of a recent graduate's ultimate "permanent" job assignment. The training program, properly conceived and executed, serves to determine specific capabilities in addition to imparting professional information and company background.

Though lack of specificity of job assignment and the importance of potential ability are two distinct problems when we contrast the college interview with the standard in-plant type, they are closely related from a cause-and-effect standpoint, with each affecting or being affected by the other. For example, the importance attached to a candidate's potential follows from the inability of the interviewer to hire him for a specific job. But it is also the inability to measure or define capabilities—actually, to determine predictors of success in today's rapidly advancing technology—which has brought about the modern training program that in turn obviates the need for a permanent specific job assignment immediately following graduation.

Factors Influencing the Character of the Campus Interview

The third important difference between college recruiting and other types of recruiting is the fact that initial interviewing is done almost exclusively on-campus. The average medium-sized company looking for 50 to 100 graduates each year will canvass 40 to 70 colleges over one-half the geographical area of the United States, the specific area depending on the location of its headquarters office and its plants. Under these conditions it is not usually economically feasible to send more than one or possibly two recruiters to any one college. The total company recruiting effort may be shared by two, three, six, or more different recruiters, but their pooled judgment is never possible at any one school. They will fan out from headquarters and operate more or less independently. While further interviews may be scheduled at the plant for the better candidates, the average company cannot afford to pay for plant visits for every applicant.

Because interviewing has to be done on-campus, unusual importance attaches to the interviews of a single recruiter who must weigh the significant factors attaching to a variety of jobs he is trying to fill. Complicating this problem is the fact that campus

interviews have evolved into a 20-minute production-line routine. While facilities vary at different institutions, characteristically the recruiter will meet the college placement officer in a busy atmosphere. There may be 10 to 12 representatives from other companies there that day. After perfunctory and hurried introductions, he will be escorted to a tiny desk in a tiny room. Immediately the first candidate is ushered in. Then, every 20 minutes for the balance of the day, he will see a new face. In those 20 minutes he has to put the applicant at ease; get him to talk about himself; determine his interests; evaluate his personality; find out what his strong and weak points are professionally; describe in detail the company's training program; describe his opportunities for advancement; explain and sell the pay scale; make complete notes of all observations; and finally come to some conclusion as to the desirability of having this man in his organization.

At lunch time, he may visit the individual faculty members, talking to them about specific students in whom he may be interested; visit with other recruiters to feel out competition and perhaps compare notes on the average going offers; visit a fraternity house to spread seeds out as widely as possible over fertile ground; or talk to the college placement officer about specific questions, or to survey new developments. He will, of course, try not only to get information when talking to faculty members or the staff of the placement office; but he will also endeavor to point out what a grand place the firm is to work for, or possibly some new technological development with which it would be particularly desirable to be associated; perhaps he will merely try to be pleasant and congenial. Then more 20-minute interviews until he runs to catch a plane or train, to start the whole procedure over again the next day.

Effects of Competition

The competition for new scientific and engineering graduates is not something that can be adequately grasped in coldly logical terms. To be fully understood, it has to be experienced. The campus is not just a market where one bids for services. One bids, yes, but one has to sell also. It is not enough, for example, just to understand the recruit. One has to let him know that he is understood. It is not enough to want this man and let him know that he is wanted. You have to make him want you too, or he will go to your competitor. There are not enough men to go around, and a company will go out of business if it does not get its share of new scientific and engineering recruits.

So competition forces one to do more than just interview a man to determine whether or not *you* want *him* in your business. Part of the time normally devoted to interviewing must be devoted to selling. And part of the job of selection and placement is accordingly put back as a function of the training program.

One more factor must be taken into consideration, and that is the seasonal aspect of the campus interview. All interviewing will take place and final

decisions regarding employment will in all probability be made between February 1 and April 15, and the maximum effort must be put forth at this time. Senior scientific personnel can be seen at conventions during the year. Other personnel can be attracted by regular newspaper advertising. But most college seniors are too busy to attend conventions or to read the want ads of the metropolitan papers. Because so much recruiting is done within a 10- or 12-week span, engineers, chemists, physicists, or various grades of executives sometimes have to be called upon to assist the professionally trained interviewer. This means that these men should be given some orientation in the recruiting process, and their work and results coordinated.

Summary

The interview has long been the principal means of obtaining information about an applicant. In contrast to the usual in-plant type of interviews, those conducted on-campus for the purpose of recruiting engineers and scientists have changed in character for six reasons: lack of specificity of job assignment; the potential usefulness of the recruit is more important than his immediate value—and harder to assess; interviews are on-campus, not in-plant; they are a 20-minute, production-line type; the competition for graduates is intense; and the interviewing is highly seasonal. The college interviewer has little precise knowledge of specific job requirements as they relate to a particular applicant and little, if any actual, knowledge of valid predictors of success on the job.

As a result of these factors, the modern training program is assuming an important placement function. Because of competition, the traditional interview *of* the candidate is becoming also an interview of the recruiter *by* the applicant. Line supervisors and engineers are now required in some cases to carry out the college recruitment function, a development that necessitates some orientation in the interview process and continuing coordination for best results.

How Old Is "Old"?

ARE A MAN'S views of what constitutes youth, maturity, and old age affected by his social status? According to a recent survey by the University of Chicago's Committee on Human Development, business and professional men feel old five to 10 years later than working class men.

The subjects—240 men and women aged 40 to 70, and representing four social class categories—were asked to define the periods of life and to indicate the chronological age of such descriptive terms as "young man," "mature man," and "old man."

The survey found that "middle class" men tend to divide the three periods at 30, 45, and 65. "Upper working class" men set the dividing lines of middle and old age back five years, to 40 and 60 respectively. "Lower working class" men see maturity setting in at 35 and the onset of old age at 50, with little progressive decline after the half-century mark.

. . . Though management is increasingly coming to recognize that the company's responsibility toward the older employee does not begin and end with the pension plan, just what form any counseling of pre-retirants should take is still an open question. Some interesting findings from a pilot program are summarized here.

Retirement: An Experiment In Group Counseling

FRED T. GOLUB, JOHN F. McBRIDE, and HAMILTON STILLWELL*

SOCIAL SECURITY and private insurance plans have removed much of the fear and dread that was once associated with retirement. But financial security, it has been discovered, is only one of the elements necessary to happiness in retirement. Like any other phase in life, success in retirement is the product of careful planning and preparation.

At Personal Products Corporation in Milltown, New Jersey, an experimental pre-retirement planning program was conducted for employees approaching retirement age. Personal Products is a manufacturer of converted paper products. Of the approximately 800 employees at its Milltown plant, 61 will reach retirement age within 10 years. These 61 men and women made up the participants or "class" in the program.

The experiment grew out of suggestions made by the leaders of two employee organizations — the Quarter Century Club, an organization of employees having 25 or more years of service with the company, and Perso, an employee organization set up to sponsor plant recreational, social, and adult-education activities. In response to the suggestions of these two organizations, the company training director formed a committee, at whose first meeting it was decided to ask for help from the Rutgers University Extension Division. Rutgers displayed enthusiastic interest and the Chairman of the Public Program of the Institute of Management and Labor Relations became a member of the committee.

It was decided that participation would be limited to employees who were within 10 years of the com-

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pulsory retirement age (65 years). While plans were still in the tentative stage, employees in this group were invited to an evening meeting to discuss the program so that the committee could make plans to suit the interests of the participants. Those who attended showed a lively interest in the proposed program. Among the many questions that were raised at this first meeting were:

¶ Approximately how much can I expect from the company's retirement insurance plan? How much from Social Security? What are the benefits available from Social Security? How do I apply for them?

¶ What life insurance and what health insurance coverage will the retired person have when he leaves the employment of the company?

¶ What ways are there of investing funds during the next five years that would aid the financial condition of employees?

¶ What opportunities are there for part-time employment for men and women when their regular employment ceases?

¶ What vocational opportunities are there specifically for women who have received no particular training other than for their present vocation?

¶ Where can testing be done which will help a person decide where his talents lie?

¶ What about moving from New Jersey to another part of the United States?

Content of the Program

As a result of this first meeting a program was developed that required seven one-and-one-half hour meetings. The seven meetings were held in the plant and on company time. There was a one-week interval between meetings and each meeting was duplicated on the meeting day in order to allow workers on each shift to attend. An average of 15 participants attended each meeting. Following is a digest of the seven meetings:

1. *Social Security and the company's retirement insurance plan.* At this session, all the potential Social Security benefits that the employee would be entitled to upon retirement were explained. The speaker also explained how to apply for benefits, the necessary proof of age, how the individual could make sure that his Social Security records were correct, and the death benefit and survivors insurance provisions of the Social Security law. Each individual was given a form showing approximately what his benefits would be from the company retirement insurance plan.

2. *Personal finance.* At this first session, the many factors which affect our economy, and how, in turn, it affects the economic condition of the individual were outlined.

3. *Personal finance.* The second session on this subject was devoted to practical money management. Lively interest was provoked in such subjects as:

1. Budgeting and how the budget will change after retirement.
2. Home ownership, obtaining clear title, paying off mortgage, whether to maintain a home or rent, moving to retirement areas away from home town or state.
3. How to make a will and why.
4. Insurance.
5. Investments and investment trusts.

The majority of the men and women who attended were too near to retirement age to gain much from the last two subjects but they were keenly interested in the first three.

4. *Maintaining health after* 50. Emphasizing the importance of thinking positively about the subject of retirement, the speaker recommended that each person select at least three

areas for self-expression and develop them so that when he retires he has worthy retirement activities.

At this meeting, several Kodachrome slides were shown which illustrated the danger spots which should be watched out for by the older person.

5. *Emotional adjustment to retirement.* This session pointed out many reasons why retirement is a challenging time. The importance of maintaining emotional poise was stressed, and a number of suggestions regarding hobbies for older people were discussed. The group suggested the following activities in which they might be interested: tool repair, ceramics, raising of plants in greenhouses, volunteer services, cooking and baking, farming and gardening, and stamp collecting.

6. *Planning for future activities.* The purpose of this meeting was to start the participants on the road toward active planning for post-retirement activities. They were shown how to plan, how to select activities suited to their individual aptitudes, and, finally, where to learn any skill that was necessary to the successful execution of their plans.

7. *Community needs and resources.* While the first six meetings had been designed to help those who attended, and give them practical guidance, the aim of the last meeting was to bring together a group of community leaders and a group of potential retirees to discuss the resources of the community and the ways in which the advice previously given could be put into practice. Most of the meeting time was spent on three subjects—practical adult education, clubs and recreation facilities, and part-time employment opportunities.

What the Program Revealed

As a result of the seven meetings, certain facts became clear:

1. The individual in industry who is nearing retirement age is apparently interested in discussing his retirement plans with company representatives and his fellow employees.

2. There are informed and skilled people in every community who can come to the plant and aid the company and its employees who are facing retirement by discussing the issues they will face.

3. Even though a program of this type is offered on company time, not all those who are eligible to attend the meetings will come.

4. The community is interested in the retired person and his future plans; it has many resources available to the retired person and, through a counseling program of this type, community leaders are able to bring to the attention of the group ways of assisting the retired worker.

So far as the company is concerned, some of the things learned from this pilot program which will affect future planning were:

1. Although there was a pre-planning session with a representative group of the retiring employees, more time should have been spent on this aspect of the program.

2. Community leaders should be given more time to prepare their section of the seven-session meeting.

3. The union which bargains with

the company was informed of the program and sent a representative to the first meeting of the series. Future plans should provide for a union representative to attend the planning meetings.

4. The question as to who should attend the meetings is still unanswered. In this case, a 10-year span was used, but certainly people who have 10 years to go before retiring do not have the same interests as those who have only two years. Possibly groups should be more alike in their distance from retiring age.

Though, as can be seen, the project outlined here was only a beginning, it confirmed for those who participated in planning it a belief that there is need for further refinement of the initial program. The attendance at the meetings and the questions that were raised showed that employees have an urgent need for counseling in this area. This project aimed to bring education into a rather new and exciting area and, if it proved anything, it was that education, industry, and the community working together can contribute a great deal to the value of retirement years.

Retirement—As the Pensioner Sees It

DESPITE THE INCREASING attention now being paid to the emotional difficulties associated with retirement, a recent survey by Thompson Products, Inc., Cleveland, as reported in *Factory Management and Maintenance*, indicates that money problems, not idleness and social readjustment, are uppermost in the minds of pensioners themselves.

The survey, which covered 250 pensioners of the company, found no significant difference between the replies of hourly and salaried workers. The overwhelming majority of the respondents (82 per cent) agreed that it was more important to plan to be free of financial worries by retirement time than to have something else to do. Fifty-three per cent considered that, in arranging to be free of financial problems, it was most important to have enough personal savings put by; 40 per cent thought it was more important to have one's home paid for, and only 7 per cent thought the most important thing was to have another job.

Asked what they thought it most important to arrange to be doing during one's retiring years, 47 per cent voted for a hobby and 40 per cent expressed the desire to loaf and do whatever they felt inclined. Another job was considered most important by only 13 per cent.

Seventy-four per cent of the respondents considered that a person should start planning for retirement at age 55 or earlier, and 96 per cent believed that some assistance from the company in planning would be helpful and desirable. Asked what kind of assistance would be most helpful, 47 per cent voted for private interviews, 40 per cent for group meetings, and 13 per cent for books, pamphlets, and magazine articles.

Basics of Personnel Testing

To the test technician, this discussion of testing terms and facts, which was originally prepared as a guide for the Navy Department, will contain little that is unfamiliar. For those executives who have had no specific training in this area but have acquired a working knowledge of testing terminology on the job or in the course of their reading, it may serve, however, as a refresher course, as well as a quick source of reference for members of the personnel staff generally.—EDITOR.

PERSONNEL SPECIALISTS have heard more and more about testing since the end of World War II. While they are interested in every means of doing a better job, they have heard of disappointing results of the use of tests as well as of remarkable successes. It has become quite apparent that tests are specialized tools which require training and experience for their most effective use. They must be used in the right place, in the right manner, and in the right combination with other means of personnel measurement and evaluation. The tools themselves must be of good quality and the workmen must know how to interpret and apply the results. Otherwise good intentions will not avoid disappointment, confusion, and failure to keep up with progress.

This brief, non-technical guide to testing terms has been prepared in the hope that it will be of some value to personnel specialists in improving their skills in the use of tests. Obviously, a simplified account such as this can furnish some information on fundamentals, but it cannot attempt to answer all the practical questions that may arise in the use of tests. Those who have not been specially trained in testing may find that the technical vocabulary of some worthwhile publications discourages frequent reading. For the sake of brevity, most writers on testing subjects must assume that the reader has a lot of background information. Personnel experts who have acquired this knowledge in the course of their training or experience may find, therefore, little use for this summary. The definitions and explanations given here are intended to provide a quick means, for those who have not yet acquired it, of familiarizing themselves with the language used by testing specialists so

NOTE: This discussion of testing terms has been adapted from a manual prepared for the Navy Department by the U. S. Civil Service Commission, Washington, D. C.

that they will be able to read test reports with increased understanding. It should be emphasized, however, that this discussion is not a substitute for formal study and training in college courses in tests, measurements, and industrial psychology, or for serious study of the comprehensive literature on these subjects.

The following sections provide definitions of terms used frequently in talking and writing about tests. In each case, the definition and explanation are those which seem to meet the practical needs of personnel specialists for something concise and workable. They should not be taken as the last word on the subject. If the explanations conformed exactly to the textbook definitions written for professional psychologists, we should have a formidable technical book instead of a quick source of reference.

Reliability

By *reliability* is meant the consistency of results which can be obtained from a test when applied to a particular group. When a test is said to have high reliability, it means that a person tested today and tested again at a later period with the same test and under the same conditions will get approximately the same score.

A test is reliable if it gives a dependable measure of whatever it may be that the test is measuring. Reliability is obviously important because, if a score can vary considerably, not much reliance can be placed on the score obtained today. Certainly no personnel management decisions should be based on a test that is not reliable.

A number of factors affect the reliability of tests. On a written test, the use of additional items will generally increase its reliability. Hence, it may be said that a test is too short to be reliable and should be lengthened to obtain sufficient reliability. The conditions under which a test is administered will also affect its reliability. For example, if 20 minutes are allowed to one group of competitors and another group is allowed 30 minutes for the same test, the reliability of the results will be affected, especially when people have to rush in order to answer the questions in the time allotted.

Standardization of scoring procedures improves reliability. For example, in a performance test, if there are no standard instructions for the raters, unreliability will result. Especially important in this connection is standardization on what actions are to be considered acceptable. A highly practical-looking test can be completely worthless if competent examiners cannot agree on the scoring of the same performance.

Validity

A test is valid if it gives a satisfactory measure of whatever characteristics or jobs it was *intended* to measure. *Validity* is the degree of the relationship between results on the test and relative success on the job or the function for which the test is being used. This degree of relationship can be expressed in the range from .0, indicating complete absence of relationship between the test and job performance, and 1.0, which indicates a perfect relationship. A perfect relationship means that the person

Job Performance	Test Scores: Low	Middle	High
High	0	0	100
Middle	0	100	0
Low	100	0	0

EXHIBIT I

Diagrammatic Illustration of Perfect Validity

who scores highest on the test is also the most competent on the job, the person second highest on the test is second highest on job performance, etc. Since no selection methods are perfect, the objective, therefore, is to use selection methods which furnish the maximum possible validity.

Validity can be expressed in many different ways. It can describe the degree of success with which tests achieve a number of different and desirable objectives. Each of these objectives can be called a criterion for the success of the test. Thus, validity can express the relationship of a test to the ability of people to learn something, as when tests are used to select people for a training program. Validity may express the relationship between test results and people's performance on part of their jobs. For example, a test may be devised to measure accuracy in performing clerical work, such as computing payrolls. In that case, the yardstick or criterion used to measure the validity of the test might be the accuracy of the persons being studied rather than other characteristics, such as judgment or amount of work accomplished.

The concept of validity is fundamental in the use of tests. For some tests there is practically no evidence as to their validity, and their use is based on the best judgment of those concerned on the relationship between the factors measured by the test and the requirements of the job. For other tests there are extensive validity data. A question often raised about validity data is whether data obtained in one organization are necessarily valid for another. Strictly speaking, it would be desirable to validate every test in the particular situation in which it is being used. But this approach, if literally applied, would be so expensive as to be impractical. Therefore, a practical approach is to validate a test in representative situations with a sufficient number of cases so that one can speak with some degree of confidence about its validity in other situations. If job analysis indicates that the organization which wishes to use the test has similar job requirements to those where the validation work was done, there is a reasonable possibility, but no certainty, that the test will be applicable in the new situation. Examples of how the results of

Job Performance	Test Scores: *Low*	*Middle*	*High*
High	33	34	33
Middle	33	34	33
Low	33	34	33

EXHIBIT 2

Diagrammatic Illustration of Zero Validity

a validation study might be expressed are shown in Exhibits 1, 2, and 3.

Exhibit 1 indicates, for the sake of illustration, perfect validity. It shows that every one of the people high on job performance received high test scores and that every one of the 100 people who were low on job performance received low test scores. Exhibit 2 is an example of zero validity. It shows that people who were rated high in job performance had no better chance of getting high test scores than people rated in the middle or low on job performance. Conversely, on the side of low test scores, a person rated high on job performance was as likely to get a low test score as someone rated low on job performance.

Exhibit 3 is more realistic. It indicates a definite relationship between the scores and the test and job performance, although it is far from perfect. For example, 65 per cent of those rated high in job performance received high scores in this test as compared with 30 per cent of those rated in the middle and only 5 per cent of those rated low in job performance. Conversely, 65 per cent of those rated low in job performance received low test scores as compared with 20 per cent of those rated in

Job Performance	Test Scores: *Low*	*Middle*	*High*
High	5	30	65
Middle	20	50	30
Low	65	25	10

EXHIBIT 3

A More "Realistic" Illustration of Validity

the middle on job performance and 5 per cent of those rated high in job performance.

Tables of the above kind can be prepared either for single tests or for a group of tests. Such tables are meaningful to operating officials in helping them understand the results that may be expected from the use of a particular test.

The first questions a test user should ask of someone who proposes the use of a test are: What is its validity? On what kinds of people was it validated? What was the size of the sample? The answers to these questions will help determine whether the test is useful and relevant in a particular case.

Selection Ratio

By *selection ratio* is meant the percentage of people who will be hired from among those who are tested. The smaller this percentage, the greater is the likelihood that successful results will be obtained by using the test. Everything else being equal, if the top 5 per cent on a test are selected, there will be a greater proportion of successful employees than if the top 30 per cent or 40 per cent are selected. On the one hand, this point emphasizes the importance of good and extensive recruiting in order to increase the number of competitors for each vacancy; on the other, it is a justification for broadening the area of competition, and explains why even relatively crude tests will often furnish very good results when the selection ratio is no greater than 5 per cent or 10 per cent. Of course, under present conditions of full employment, personnel officials are often happy to hire as many people as meet minimum standards. But, when it comes to promotions, there are often many competitors for a single vacancy.

Test Battery

A *test battery* is a number of different selection devices, the results of which are combined in order to determine the relative ability of candidates. In selecting a test battery, one tries to obtain tests which measure, on the one hand, all the abilities needed on the job and, on the other, different abilities, so that different tests will measure different things and therefore contribute to the final goal of maximum validity. There are statistical formulas which help determine which tests meet the objective of obtaining the minimum number of tests that furnish reliable results with maximum validity at minimum cost. There are cases where research studies indicate that four or five tests may be individually worth while, but that one test by itself is as good as the combination of tests because of the high interrelationship between the abilities measured by the tests. When no research data are available, then one is generally conservative and uses all the tests that might contribute to effective selection. One of the great values of research work is that it saves money by indicating the minimum combination of tests that is needed to do a good selection job. Savings in testing time are important to keep a testing program within practical administrative limits.

Very often, operating people look at a test battery and say that it is inadequate because none of the tests in the battery appears to measure abilities which they consider important. This kind of statement involves

two assumptions which often are not justified. In the first place, some tests measure abilities which are not apparent from inspection of the test questions. Second, there are other abilities which are so extremely vague or so extremely complex that they either cannot be measured at all or must be measured through their components or indirectly. For example, a test technician was told that the reason for the failures among a group of machine operators was that they were timid and afraid of the machine and this affected their work performance. The test technician was asked to prepare a test to measure timidity. It is obvious that timidity is such a general and complex term that years would be required to develop valid measures of this characteristic. As it happened, the test technician discovered in his research work that a test of finger dexterity furnished high validity in this situation. The line manager, looking at this test, would have assumed that his statements had been ignored because there was no apparent test of timidity included. Actually, the finger dexterity test was a measure of timidity because it measured the basic factor causing the timidity, namely, the fear of those without dexterity that they would be hurt by the machine.

Test Difficulty

One of the most frequent errors in testing is the use of tests with an incorrect range of *difficulty* for a given situation. If a test is too easy, a large number of persons will get perfect scores and the test will fail to indicate their relative level of ability. If a test is too difficult, many persons will receive scores around zero and the test, therefore, will be useless. In selecting tests for a particular purpose, the user of the test must know the approximate level of ability of the group to be tested so that a test with an appropriate range of difficulty can be used.

Scoring of Tests

In scoring tests, the terms, *chance score, passing score, test standards, scoring formula,* and *test weights* are frequently used. By a *chance score* is meant a score which a person might achieve even if he knew nothing about the subject. A *passing score* means the minimum score that will be considered as satisfactory performance on a particular test. *Test standard* means two things—how an individual's score compares with people previously tested on the same test, and how it compares with that of people who are successful on the job.

As an example of the first use of this term we might say that a person's score is such that, compared with people in general, his score exceeds that of 80 per cent of the people while 20 per cent do better than he does. In interpreting scores in this manner, one should be certain that one knows the characteristics of the group from which the data are obtained for the purpose of comparison. For example, it might be useful to compare an apprentice's score on a trade-knowledge test with that of a journeyman in the same trade but obviously this represents a different standard from that of comparing the apprentice with other apprentices with an equal amount of training. An example of the second use of the term is the interpretation of a person's score

by saying that he has six chances out of seven of being successful, four chances out of seven of being successful, etc. This type of interpretation is possible only when research work has been done showing the distribution of scores of successful and unsuccessful people on a standard population which is relevant to the job for which a person is being considered. This type of data is highly important in hiring or promotion. For example, if an applicant for a position obtains a score equal to only the lowest 10 per cent in the population, it might be an indication that, even with the present labor shortage, he should not be employed. Similarly, in a promotion situation, if it is known that even the best employee is substantially inferior to employees in general on the important ability being measured, this fact will help to decide whether outside recruitment is desirable in filling the vacancy.

A scoring formula is applied after the number of right answers on a test and, in many cases, the wrong answers, have been tabulated. Examples of scoring formulas are: *Number of Rights; Number of Rights minus ¼ Wrongs;* and *Number of Rights minus Number of Wrongs.* The first formula, *Number of Rights,* is generally used on tests where adequate time has been given to all competitors to finish the test. The formula, *Rights minus ¼ Wrongs,* is frequently used when each test question has five choices and a person could presumably get one out of every five questions correct just by guessing. The purpose of using the *Rights minus ¼ Wrongs* formula is to prevent any advantage for guessing. (The formula, *Rights minus ⅓ Wrongs* is used when there are four choices for each question.) It has been found that these corrections are especially important in speed tests, where a person may be tempted to spend his last few seconds just as time is called in marking answers at random in the hope of picking up some additional points. In computing the score, questions that have not been answered are ignored.

The formula, *Rights minus Wrongs,* is used when the job analysis has indicated that accuracy is highly important. For example, in engineering work, in proofreading, and in many other types of employment, accuracy may be as important as speed or may be even more important. The object of the test is not merely to find out how many right answers are given but also to find out how many errors are made. The scoring formula is a means of carrying out the purpose of the test, it is not merely a correction for guessing. A heavy penalty for inaccuracy is appropriate in this case. It is desirable in such a test that the instructions make it clear to the competitors that accuracy is a highly important consideration.

Test weights means the multiplying factor which is applied to each test in a battery in arriving at a final score. The most desirable method of determining the weight of each test is by means of a research study which will indicate the weights to be used to achieve the best results. Where such a research study is not possible, test technicians have to use their best judgment plus data on the distribution of scores in determining the weights to be used. For example, a candidate might receive a score of 35 on a test

with a weight of 2, a score of 40 on a second test with a weight of 1, and a score of 38 on a test with a weight of 3. His total score on these three tests would be 224 points—$35 \times 2 + 40 \times 1 + 38 \times 3$. Test technicians use a formula to determine the distribution of scores before the weights are set.

The concept of chance score, which has been defined above, is important in relation to setting the passing score. Obviously, if the passing score is not significantly different from the chance score, there is no certainty that the candidate is displaying any real knowledge or ability by obtaining a passing score. The most important factors in determining a passing score, in addition to the chance score, are the requirements of the job, the difficulty of the test, and the validity of the test.

Parenthetically it should be noted that the validity of a test is not an absolute indication of its value for selection—the value of a particular test is also related to the passing point that is used.

At a time of full employment, it may be necessary to use passing points lower than those which would furnish the best results in order to obtain enough people to do the work that has to be done.

Correlation

A correlation coefficient is a number expressing the relationship between two sets of numbers. For example, two sets of numbers may be scores on two different tests or one set of numbers may be scores on a test while the other set represents the relative job performance of individuals. Multiple correlation permits determining the relationship between one set of numbers and several other sets of numbers. Multiple correlation is used, for example, when one wants to determine the relationship between ratings on job performance and the several tests which have been administered to the people in the sample. As previously indicated, correlations are usually expressed in terms of numbers between 0.0 and 1.0. For a number of technical reasons, generally the highest correlation achieved in validating tests is approximately .60, and as a generalization the lowest limit used for the inclusion of a test is approximately .25 or .30, depending generally on the uniqueness of the characteristics measured by the tests and the significance of the data as determined by the size of the sample. For example, a correlation of .25 based on 500 cases is much more significant than a correlation of .45 based on 15 cases. Correlations for the *reliability* of a test generally exceed .85 when the test has been well prepared.

Objectivity

The extent to which judgment is required in determining the score of the person is the measure of the test's *objectivity*. For example, where a person is given five choices and has to select the one correct answer, assuming that there has been a thorough statistical study in determining the correct answer, there is no judgment involved in determining his score and therefore the test is called highly objective. An essay test, where the

person is asked to discuss a topic and the raters are asked to rate his effectiveness of expression would be a subjective test. Obviously, an oral interview, the ratings of which are so highly dependent on the best judgment of the raters, is also a subjective test. However, there are methods of increasing the objectivity of even subjective tests. For example, a performance test for auto drivers can be scored in an objective manner whereas the same test can be highly subjective if scored in a different way. In addition to administrative reasons, objectivity is highly important in achieving reliability because different raters in a subjective test will use different standards leading to inconsistent results.

Speed and Power Tests

In a *speed test*, a person is given such a short time to answer the questions that it is improbable that he will be able to finish the test in the time allotted. The speed test is used either when the actual job is rated on quantity or requires speed, such as in the case of routine clerical work and typing and stenographic duties, or when the nature of the tasks in the test is so simple that if a person had sufficient time he could answer all the questions correctly. When the above two conditions are not present or are relatively unimportant, sufficient time is allotted so that practically all competitors can finish the test. This is the definition of a *power test*. Tests of knowledge are generally power tests; tests of learning ability are sometimes speed tests and sometimes power tests.

Item Analysis

By *item analysis* is generally meant a tabulation of responses of candidates for each choice on each question of the test in order to determine whether any of the questions were ambiguous and to determine the relative difficulty of the various questions. For example, if on a particular question 75 per cent of the competitors select a choice which is not in correspondence with the intended answer, the test technician would examine the question to determine whether there were any defects in it or whether it was only a difficult one. Customarily, the tabulation of the number of competitors taking each choice in each question is done after the papers are separated into two groups, those who obtain a relatively high score on the total test based on the original scoring key and those obtaining a relatively low score on the total test. The major purpose of this division is to differentiate between the answers given by the relatively good candidates and the relatively poor candidates. When the data are available, this division into high and low groups is based on job performance rather than test scores. If the data and the analysis justify, more than one answer may be considered as correct in the particular question. In re-use of the question the ambiguities can be removed and also the item analysis data will enable the test technician in the new test, to include items of appropriate levels of difficulty.

Face Validity

There are two concepts involved in the term, *face validity*. In the first

place, it means that the questions on the test are directly related to the job and, therefore, the candidate will be gratified because of this apparent relationship. The second and related definition is that the questions are based on a thorough job analysis and therefore it can be presumed that the test has actual validity for selection for the job.

Candidates often complain about tests that have questions which do not seem to be related to the job to be done. They are much better pleased when faced with what seem to be more relevant questions. In general, aptitude and mental ability tests are often criticized because they do not seem to have face validity, while knowledge tests are favorably received because the questions relate to the job.

Generally speaking, within the limitations of the time at his disposal, a test technician will prefer to use questions which have face validity, if they are also valid for the purpose intended. It is often said, for example, that a candidate for the position of social worker will complain if the question asks, "How much is 2 + 2?" But he will not complain if the question asks, "How many are two clients and two additional clients?" In other words, transforming a test without face validity into one with face validity may entail no more than editing a general test for a specific purpose, though in other cases much more extensive work has to be done to achieve face validity.

Learning Ability

In modern thinking about *learning ability*, it is recognized that persons may have different levels of ability for various types of tasks relating to learning, such as tasks requiring skill with words, or skill with numbers, or ability to get mechanical ideas down on paper. Therefore, tests have different types of questions designed to gauge verbal ability, arithmetical reasoning ability, abstract reasoning ability, spatial reasoning, and memory. The types of tests to be used are obviously those most directly concerned with the factors involved in job success. Very often, when several tests are used for the same job, different weights are given to each specialized type of test in accordance with either job analysis alone or a complete research study.

Aptitude Tests

Aptitude tests are especially appropriate for use when a person does not have previous training or experience in the task and the purpose is to measure the fundamental abilities related to learning the new job. The most common types of aptitude tests are found in the clerical field and for employees in semi-skilled trades. Much of the research work in the field of testing is based on aptitude tests because they are the ones most often used for original selection.

Performance Tests

The term, *performance test*, ordinarily refers to a test that involves the use of physical apparatus. The product of the use of the physical apparatus is the kind of product that is actually made on the job. For example, performance tests have been devised for a large variety of mechanic positions and they are also useful for such positions as typist and

draftsman. In devising performance tests, it is essential that the tasks involved be a representative sample of the actual job to be performed. When well designed and when the rating method used has been standardized, performance tests have been found to furnish high validity. Their usefulness has been impaired to some extent by a number of factors, including expense, the possibility of injury to the candidates, and the need for special equipment. It cannot be overemphasized that, in order to obtain validity for a performance test, the tasks must be standardized. It was found in one case, for example, that different competitors for the same job were being asked to cut different types of metals with different characteristics. Obviously this situation did not provide the standardized approach needed for validity.

In addition, there are tests, such as proofreading, which do not involve physical apparatus but are related to the fundamental principle of performance tests in that they actually represent parts of the job to be performed.

Personality Tests

Though *personality tests* are widely used in industry, many of them are of the type where it is easy for candidates to give answers that will help in obtaining a higher score but are not truly characteristic of them. Further, very little research work has been carried out to justify the extensive use of personality inventories. Many people have eagerly adopted such tests because of the great importance of measuring personal characteristics; but it is not generally realized that the claim of a test to measure a particular factor is not sufficient evidence that it actually measures the factor.

Extensive research work is now under way in an effort to improve personality inventories. It is to be hoped that this research work will result in the development of selection methods which can be used by personnel specialists.

Interest Inventories

There is general recognition of the importance of measuring interests in order to secure effective employees who are happy in their work. The Kuder Preference Record, the Strong Interest Blank, and the Allport-Vernon Study of Values are in common use for the measurement of interests. The Strong Interest Blank is different from the other two in that its scoring indicates the relationship of the candidates' interests to the interests of persons in specific occupations, such as accountancy or engineering, while the Kuder and the Allport-Vernon inventories measure a person's interests in general categories, such as theoretical and persuasive. Job analysis and research work would indicate which of these general characteristics were related to success in a particular occupation. Relatively extensive research work has been done on all three of these interest inventories and at least the technique of study of interests appears to be a promising method to use as part of an over-all testing program, particularly for placing a person in a particular type of work after he has been selected for a general category of positions.

Projective Devices

During the past few years there has been a great deal of interest in and publicity for *projective devices*, such as the inkblot test and the Thematic Apperception test. A projective device can be defined as one which presents a relatively free situation to the individual; his response is largely dependent on what he projects into the situation from his own personality. While there has been interest in these methods, there is very little research evidence at the present time as to their validity for selection for industrial jobs. In any event, these methods should only be used by highly trained specialists with much experience with these particular instruments and with extensive knowledge of the characteristics needed for job success.

Placement

By *placement* we mean the assigning of a person to a specific job in the general category of work for which he is qualified. For example, we may have hired a mechanical engineer. The placement process means determining which type of work, such as design, research, production, and so forth, will be most suitable for him. It is not recognized often enough that the best selection devices can be nullified if they are not accompanied by good placement, while good placement accompanied by good training and good supervision can often help overcome deficiencies in selection. Tests are one part of a total program that can be used to help place employees in jobs which best fit their characteristics. Methods that can be used to achieve good placement include the use of interest inventories, the interpretation of the different parts of tests that the person originally took for selection in order to determine in which phase of the work he is most capable, rotation among different types of work so that he can express a preference for the type that seems most suitable, and interviews with the employee in which the various types of work are described and he is given an opportunity to express his own interests.

Tests for Promotion

Formerly, though tests were often used for original selection, they were infrequently used for promotion. The idea seems to have been that an employee being considered for a promotion could be observed in his day-by-day work, from which it could be determined whether he should be promoted or not. For a number of reasons it is now recognized that the old assumption will not hold. In the first place, employees are frequently promoted to jobs requiring new skills and the evaluation of their performance in the old job is not sufficient to indicate whether they have the additional skills needed. In the second place, the use of evaluations by individual supervisors means that the conditions are not standardized because each supervisor may use different standards and each employee may have faced different work problems. Also, employees like to have an opportunity to compete for promotion, and tests often furnish a practical way of permitting widespread competition at relatively small cost. Finally, to the extent that the emphasis in promotion,

as in selection, should be on obtaining the best employee, rather than just a satisfactory employee, tests, to the extent they are valid, will help in accomplishing this objective.

Validation Studies

A number of terms are used in conducting research in the field of selection and it may be useful to summarize at this point the various ones that are used. The *criterion* is a basic part of a validation study because it is the yardstick which is used to measure the value of the various selection methods that are being tried out. The criterion, in order to be useful, must actually be representative of the requirements of the job rather than being limited either to a few phases of the job or to non-representative characteristics. For example, military psychologists, through necessity, have often used success in the training program as the criterion against which to validate their selection methods. But they have come to learn that this criterion is often non-representative because actual success in combat may require different skills and abilities.

Another aspect of lack of representative character in a criterion is the one relating to the point of view of the raters who furnish the information. If the raters who furnish the criterion information do not have an up-to-date idea of job requirements or if their point of view is relatively narrow in regard to the requirements of the job, the information they furnish may be definitely damaging and misleading if the technician conducting the study is not aware of this situation. For example, if the raters feel that only persons with 10 or 15 years' experience can do a particular job and if a more representative group of raters feels that this is not so, it is obvious that the first group of raters will furnish information which will not be productive.

Test technicians have developed a number of different methods of collecting information from raters. In each case, the objective of the technician is to get information which is representative and reliable so that his yardstick is a firm one.

The next important term used in validation studies is the *sample* of cases to be included. Research studies cannot be conducted if the following characteristics of the sample are not obtained. In the first place, the sample has to include persons of a wide range of ability; a narrow range, either the top or the bottom, makes it impossible to determine whether the tests can distinguish between various levels of ability. For example, if everybody included in the sample because of prior selection is an outstanding employee, this sample should be discarded for this purpose. Second, to the greatest extent possible, the persons in the sample should have backgrounds which are representative of the persons to whom the tests resulting from the research work will be applied. If, for example, the present group of supervisory selection, the results will college graduates and they are offered as a sample for research work in supervisory selection, the results will be meaningless if the group to be tested with the new methods are not college graduates.

A third and obvious characteristic of a sample is that it should be as large as possible so that the results

will be meaningful and significant. Also, it is desirable to include in the sample only those who have worked for a sufficiently long period on the job so that the ratings received for them are reliable in the sense that the men have had sufficient time to demonstrate their relative ability. Finally, it is generally undesirable to lump together in one sample people doing heterogeneous types of work because this heterogeneity may obscure the value of the selection methods being tried out. It is obvious that in practical research work there are frequent compromises with the above criteria, but the research worker in this field tries as far as possible to meet the above conditions in order to insure desirable research results.

The term *cross-validation* is often used in studies of this type. It means applying the results obtained from one sample to a second sample in order to avoid basing actions on results which may have been due to chance factors.

Significance of Statistics

Very often, in interpreting statistics, people arrive at conclusions which are not warranted. For example, they will say that a score of 83 is definitely better than a score of 81; they will say that the fact that 65 per cent of a group of people passed a certain test one year compared with 70 per cent the year before indicates that the test was more difficult the second year; they will say that a correlation of .40 is higher than a correlation of .35. Each of the above statements implies that there is a significant difference between the two sets of numbers. Statisticians have formulas by which it can be determined whether two numbers, percentages, correlations, or any other set of figures are actually significantly different from each other. Without the application of these formulas, unjustified conclusions may be made in comparing two sets of figures. An important factor in determining whether two figures are significantly different is the number of cases upon which the two sets of figures are based. The reliability of the data is also fundamental.

In addition to the significance of differences, there are many other reasons why data obtained in two different situations should not be compared. For example, it may be misleading to compare the percentage of people with high morale in one department with a similar percentage in another department, if one is a laboratory and the second an office. It may be misleading to compare the percentage of two groups passing a test if different minimum qualifications were used for the two groups. In other words, the characteristics of two groups being compared should be known in full detail before comparisons can be meaningful.

It is hoped that those who read this summary will become sufficiently interested in testing to read more about it. It is also hoped that personnel specialists will recognize that the field of testing is a complex one and that professional assistance is desirable. However, it is realized that, in practical day-by-day operations, good judgment may often have to be substituted for research because at no time can one answer all the questions in the field of selection on the basis of sufficient research evidence.

THE PERSONNEL BOOKSHELF

JOB EVALUATION. By E. Lanham. McGraw-Hill Book Company, Inc., New York, 1955. 391 pages. $6.00.

*Reviewed by Ralph Pulver**

This is a comprehensive examination of a management technique that has reached maturity within the last decade. Despite its fairly widespread acceptance in industry, job evaluation is still a stranger to some 75 per cent of American companies, many of which are not considering its use in any form at present. However, a sizable number are now contemplating installing a formal plan, and it is to this group that *Job Evaluation* is primarily addressed.

Stressing the importance of a sound wage and salary structure, and the value of a systematic approach, the author takes her cue from the statement of one labor relations executive: "No company with a modern industrial relations program can afford to be without job evaluation."

She defines job evaluation as "determining the value of an individual job in an organization in relation to the other jobs in the organization." The text stays close to this definition, and explores every aspect of its subject.

Warning that "job evaluation installation at best is a time-consuming task," the author proceeds, step by step, through the experiences that all organizations encounter, from first inspiration to functioning plan. At the various stages of developing the plan and in many aspects of its final form, a company faces sound and legitimate choices —two, three, or four recognized ways of proceeding. One by one, the author gives each due consideration and an unbiased appraisal, usually with exhaustive pros and cons. Ultimately, however, she recommends the best or the most popular choice, substantiating her selection with reasons based on current industrial practice.

Among the many problems discussed in the book are the *organizational* aspects of installing and administering a job evaluation program—who is responsible for what; how job analysis, job description, and job rating are related to job evaluation; the establishment of job classes; what should be done to insure proper employee classification; how job evaluation and the wage survey complement each other; and the rate structure. At this point, the book takes a brief flight into the realm of the technical and the theoretical, but comes back to reality with a neatly packaged plan and the down-to-earth task of making it a workable and permanent part of the organization.

In short, this book is soundly conceived and well executed. It can become a standard text in the field. It has no axe to grind, no pet system or theory to sell, and it covers the tested, tried, and successful well. It is more conversant with the practical problems, the organizational considerations, and the realities that the job evaluation program has to live with than many other books on the same subject.

* Wage and Salary Administrator, Spiegel, Inc.

On the other hand, the author has made no attempt to advance the technique—to explore new possibilities or to dissect recent ideas like the Basic Abilities approach. On the whole, therefore, while it cannot be said the book will be found equally rewarding by all types of readers, it comes close to achieving that ideal.

For the executive at any level, looking ahead to his first experience with a job evaluation plan, it offers an invaluable and comprehensive guide. This book is all he needs. For the bewildered and disillusioned executive, wondering what has gone wrong with his installation, it will provide enlightenment, encouragement, and probably inspiration for getting on a sounder basis. For the executive already administering an adequate plan, it may serve as a refresher course, and possibly as a source of ideas for improvements and refinement. But for the pioneer, envisioning the job evaluation plan of the future, it represents just another review of ground that has already been covered.

PERSONNEL MANAGEMENT IN SMALL PLANTS: ***A Study of Small Manufacturing Establishments in Ohio.*** By Alton W. Baker. Bureau of Business Research, College of Commerce and Administration, The Ohio State University, Columbus, Ohio, 1955. 288 pages. $4.00.

Reviewed by Erling Hellekson*

Executives in small plants and offices will find Dr. Baker's work a helpful contribution to the day-to-day job of sound personnel administration.

A good employee relations program does not "just happen." In any company, whether large or small, the pattern of personnel practices is formally or informally established by the operating executives. But, until now, small companies have lacked authentic data with which to compare their personnel practices with those in companies of similar size.

Dr. Baker's *Personnel Management in Small Plants* is based on a survey of 31 basic personnel functions in 523 Ohio companies. The data is broken down for each function by company size—under 25 employees, 25-75, 75-149, and 150-299. In each grouping, prevailing practice is indicated for office and production personnel and for union and non-union shops. Dr. Baker's thoroughness and his clear logical style make his data a ready source of reference for the busy executive, whether it be to check a single function or to make a complete personnel audit.

In addition, Dr. Baker gives a brief description of each personnel function. His practical emphasis in outlining current thinking in each area should serve as a helpful refresher for the experienced personnel executive and a quick briefing for the neophyte. As an illustration of his method, we may take the section on fringe benefits. Following a concise review of the growing importance of "fringes" as a part of the total wage cost, and the necessity for arriving at a common understanding of which fringe costs should be included, Dr. Baker lists the 11 most common fringe items. This general introduction is followed by a detailed tabulation of the study's findings in this area, thus enabling the reader to see at a glance which fringe items are most common in union and non-union groups, by size of company, for both office and shop employees.

Though some may quarrel with Dr. Baker's definition of a "small business" as an organization of under 300 em-

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ployees—500 employees is often used as the dividing line—it is worth noting that it embraces 96 per cent of all manufacturing units, employing 40 per cent of all the people engaged in manufacturing activities in the United States. The importance to the operating executive of this helpful source of reference for comparing company practices, and for establishing bench marks as an aid to decisions in the personnel field, needs hardly, therefore, be stressed.

Briefer Book Notes

[Please order books directly from publishers]

PHILADELPHIA WORKERS IN A CHANGING ECONOMY. By Gladys L. Palmer. University of Pennsylvania Press, 3436 Walnut Street, Philadelphia 4, Penna. 1956. 190 pages. $6.00. A summary of the findings of a research program designed to investigate the problems and conditions of a metropolitan labor market in their historical setting. Besides presenting a detailed analysis of the Philadelphia experience from 1910 to 1950 and a broad outline of labor market patterns in this area for earlier decades, the book compares these trends with those in the nation as a whole and in other metropolitan centers. In a concluding chapter, the author discusses the economic development problems of cities in general and the flexibilities and inflexibilities of an urban labor force in adjusting to a changing economy.

INDUSTRIAL PSYCHOLOGY AND ITS SOCIAL FOUNDATIONS. By Milton L. Blum. Harper & Brothers, New York, 1956. 612 pages. $6.00. This thorough revision of a textbook that first appeared in 1949 incorporates the many developments that have taken place in the field of industrial psychology since that date. The text has been entirely reorganized and reset, and among the topics that have been added or considerably expanded are the social meaning of work; motivation and incentives in industry; the indirect method of attitude measurement and its indications; morale as a group phenomenon; leadership; differentiation of tests as predictors; job evaluation systems; and current work in human engineering.

LEADERSHIP AND PERCEPTIONS OF ORGANIZATION. By Ellis L. Scott. Bureau of Business Research, The Ohio State University, Columbus, Ohio, 1956. 122 pages. $2.00. A report of a study of how the social structure of an organization is perceived by its members, and of how these perceptions are related to personal interactions in the group, as well as to the behavior of leaders and to unit and individual effectiveness. Though the author bases his inferences on data which were obtained from a squadron of 10 submarines, the empirical results of his research should be of interest to students of organization generally.

PATTERNS OF ADMINISTRATIVE PERFORMANCE. By Ralph M. Stogdill, Carroll L. Shartle, *et al.* Bureau of Business Research, The Ohio State University, Columbus, Ohio, 1956. 108 pages. $2.00. Included in this monograph are four studies designed to test the hypothesis that the work performance and leader behavior of those who hold positions of leadership are significantly related to the nature of the positions they occupy. A discussion of a profile comparison method of describing differences between groups of persons who occupy different types of positions serves to introduce the kinds of data with which the four studies are concerned.

THE EMPLOYMENT ACT, PAST AND FUTURE: *A Tenth Anniversary Symposium.* Edited by Gerhard Colm. National Planning Association, Washington, D. C., 1956. 203 pages. $2.75. This volume, issued in commemoration of the tenth anniversary of the Employment Act, contains a number of statements from leaders in various walks of national life and a series of essays on crucial issues of economic stabilization, including the interdependence between an effective stabilization policy and the attitudes of labor; the compatibility of the objectives of full employment with rapid technological change; the problem of imbalance in economic growth; and the political implications of a full employment policy.

EARNING OPPORTUNITIES FOR OLDER WORKERS. Edited by Wilma Donahue. University of Michigan Press, Ann Arbor, Mich., 1955. 277 pages. $4.50. This symposium on the present-day barriers to the continued employment of middle-aged and older men and women, which contains contributions from management and union representatives, and state and federal officials, is based largely upon papers presented at the University of Michigan Sixth Annual Conference on Aging. The papers are organized under five main heads: trends and factors in the employment of older workers, the older individual as a worker, older women in the labor force, adapting jobs to the older worker, and creating new earning opportunities for older workers.

NATIONAL EMPLOYMENT SERVICES: *United States.* International Labour Office, 917 15th Street, N.W., Washington 5, D. C. 1955. 165 pages. $1.00. A survey of the policies, methods, and procedures of the employment service in this country, written from a federal standpoint. Numerous charts, diagrams, and tables are included.

ADDRESSES ON INDUSTRIAL RELATIONS. Edited by L. Clayton Hill and John W. Riegel. Bureau of Industrial Relations, University of Michigan, Ann Arbor, Mich., 1955. 112 pages. $2.85. This collection of addresses originally given at various meetings sponsored by the Bureau of Industrial Relations includes papers on filling the spiritual gap in American labor relations, meeting the human problems which accompany organization changes, ways to help foremen become better managers, hard money policy on personnel administration, how to talk with people, and the past and future of unemployment compensation.

TRAINING FOREIGN NATIONALS IN THE UNITED STATES. The Foundation for Research on Human Behavior, Ann Arbor, Mich., 1956. 36 pages. $1.00. This report of two seminars conducted by the Foundation for Research on Human Behavior in the fall of 1954 contains papers on the importance of training programs, factors affecting their success, comparisons between programs, and the need for evaluation and research in this area.

SAFETY MANAGEMENT. By Rollin H. Simonds and John V. Grimaldi. Richard D. Irwin, Inc., Homewood, Ill., 1956. 555 pages. $7.80. Intended both as a college textbook and as a manual for the practicing safety specialist, this comprehensive study of the basic principles of accident prevention and cost analysis includes a number of suggestions and procedures that have not hitherto been treated in book form. Among this new material are a detailed presentation of the most recently developed techniques of cost analysis and a new technique to make costs work for, rather than against, the safety program. New emphasis has also been given to safety problems in connection with manufacturing and marketing new products, and preparation for the control of catastrophes.

UNION STRIKE VOTES: *Current Practice and Proposed Controls.* By Herbert S. Parnes. Industrial Relations Section, Princeton University, Princeton, N. J., 1956. 141 pages. $3.00. A detailed report of a study designed (1) to evaluate compulsory strike vote legislation in terms both of the experience under such laws and of the extent to which current union practices appear to make legislation necessary; and (2) to shed light on the processes whereby strikes are authorized by American unions. Major findings of the study are that union leadership at both the local and international levels frequently exercises a restraining influence on rank-and-file militancy; that questionable strike practices are the exception in the American trade union movement; and that there is no evidence to permit a confident conclusion as to the extent to which strike vote legislation has actually prevented strikes.

PROCEEDINGS OF THE SEVENTH ANNUAL MEETING, INDUSTRIAL RELATIONS RESEARCH ASSOCIATION. Edited by L. Reed Tripp. Industrial Relations Research Association, University of Wisconsin, Madison 6, Wis., 1955. 332 pages. $3.00. Included in these proceedings are papers and discussions grouped under the following topics: the union's influence on management decisions in the automobile industry; labor movement in the modern world; methods and objectives in industrial relations research; automation, productivity, and industrial relations; the impact of employment security programs; union growth; and changing length and patterns of working life.

STREAMLINING THE UNION MEETING. By George Strauss. New York State School of Industrial and Labor Relations, Cornell University, Ithaca, N. Y., 1955. 54 pages. Single copies, gratis. Based upon a research study sponsored by the W. T. Grant Foundation, Inc., this monograph outlines a program for improving union membership meetings, and in general making them effective competitors with other forms of social activity.

LABOR LAW AND LEGISLATION. By Stephen J. Mueller. South-Western Publishing Company, 5101 Madison Road, Cincinnati 27, Ohio. 1956. 863 pages. $6.00. Features of this second edition are new chapters on state laws and the Fair Labor Standards Act, and extensive revisions to the chapters on boycotts, the National Labor Relations Act, and the Railway Labor Act. Eighteen new, up-to-date cases have been added, many older cases have been omitted or shortened, and the statutes in the appendix have been brought up to date.

LABOR'S WAGE POLICIES IN THE TWENTIETH CENTURY. By James S. Youtsler. Twayne Publishers, 31 Union Square West, New York 3, N.Y. 1956. 344 pages. $5.00. A comprehensive survey of American labor's wage demands, from the "living wage" of 1900 to the GAW of today. In his approach to the subject, the author takes account of the social and ethical, as well as the economic factors involved, and places chief emphasis upon the role of need in formulating wage demands. Included in the study are a sampling of the wage policies of eight affiliated unions of the AFL-CIO and a thoughtful discussion of the implications of the GAW.

SUPPLEMENTAL UNEMPLOYMENT BENEFIT PLANS. BNA Incorporated, Washington 7, D. C., 1956. 187 pages. $7.50. Following a generalized introduction to SUB, this manual provides a series of summary guides to the important provisions and variations of various SUB plans, supplemented by detailed comparative analyses of the major plan types in tabular form. Also included are the Ford Motor Company's own explanation of the purposes, principles, and content of its plan, offset by an analysis of the Ford plan by the NAM; the texts of available rulings and opinions of state

and federal authorities on legal aspects of SUB; and the full texts of 12 new unemployment benefit plans.

GUARANTEED WAGE AND SUPPLEMENTARY UNEMPLOYMENT PAY PLANS. By S. Herbert Unterberger. Commerce Clearing House, Inc., New York, 1956. 189 pages. $3.50. Divided into two main parts—understanding the guaranteed wage and operating a guaranteed wage or supplementary unemployment pay plan—this book is an attempt to supply the best available answers to the problems posed by the negotiation, design, and administration of a guaranteed wage plan. The full texts of the SUB plans of the Ford Motor Company, Continental Can, and American Can are provided in an appendix.

LABOR-MANAGEMENT RELATIONS AT THE PLANT LEVEL UNDER INDUSTRY-WIDE BARGAINING. By Milton Derber. Institute of Labor and Industrial Relations, University of Illinois, Champaign, Ill., 1956. 130 pages. $2.50, cloth-bound, $2.00 paperbound. A report of a first-hand study of the engineering (metalworking) industry in Birmingham, England. Though limited to a single industry and a very small sample of establishments within it, the study suggests a number of implications that should be of interest to those concerned with the issue of industry-wide bargaining generally.

EXECUTIVE DEVELOPMENT IN ACTION: *Patterns and Techniques.* Compiled and edited by Raymond L. Randall. Society for Personnel Administration, Washington, D.C., 1955. 31 pages. $1.00. An outline of the main trends of thought that emerged from the first and second institutes for executive development sponsored by the Executive Development Work Group of the Society for Personnel Administration. Among the topics covered are fundamentals of executive development, pitfalls of executive development programming, how to find and retain executives, how to get top-level support for executive development, and the group appraisal method.

THE FOCUSED INTERVIEW: *A Manual of Problems and Procedures.* By Robert K. Merton *et al.* The Free Press, Glencoe, Ill., 1956. 186 pages. $3.00. This revised edition represents a complete rewriting of the original text, with the aim of providing a clearer picture of the uses, procedures, and limitations of the focused interview as a tool of social and psychological research.

PROCEDURES THAT IMPROVE PERSONNEL ADMINISTRATION. By Ruth S. Knight *et al.* Civil Service Assembly, 1313 East 60th Street, Chicago 37, Ill. 1955. 35 pages. $2.00. This report comprises adaptations of papers presented at a special session of the Civil Service Assembly at which representatives of personnel agencies described recent activities and procedures they had devised to improve some aspect of their service. The reports are organized under three categories: (1) speeding up paperwork; (2) improving recruitment and selection; and (3) controlling sick leave usage.

THE FIELDS OF GROUP PSYCHOTHERAPY. Edited by S. R. Slavson. International Universities Press, Inc., New York, 1956. 338 pages. $6.00. In this symposium, 24 specialists record the developments of group psychotherapy in the past decade. Though many of the fields covered are likely to be of interest mainly to the clinician or the social worker, the personnel specialist will find food for thought in the chapters describing progress to date in the application of group psychotherapy to the problems of alcoholism, addiction, geriatrics, and mental health in business and industry.

ACCIDENT PREVENTION MANUAL FOR INDUSTRIAL OPERATIONS. National Safety Council, Chicago, Ill., 1955. 1,341 pages. $13.50. The third edition of this basic text for the safety man's bookshelf. Of its 43 sections, 18 are completely new and the rest have been extensively revised and brought up to date. Among the new subjects covered are safety organization, safety committees, safety education, maintaining employee interest in safety, medical, nursing, and first-aid services in industry, industrial sanitation and personnel facilities, and industrial hygiene.

SUPERVISORS SAFETY MANUAL. National Safety Council, Chicago, Ill., 1956. 354 pages. $3.75. Designed as a training aid for the supervisor in the fundamentals of accident prevention, this manual covers such topics as knowing where, how, and why accidents occur, maintaining interest in safety, health and first aid, instructing for safety, protective equipment, departmental housekeeping, materials handling and storage, guarding machines and equipment, and fire prevention and control. A number of illustrations accompany the text.

MAKING THE YEARS COUNT. New York State Joint Legislative Committee on Problems of the Aging, 94 Broadway, Newburgh, N.Y., 1955. 162 pages. Gratis. This report on the progress that has been made in enlarging human understanding of older people and the new facilities and opportunities that are becoming available to them includes a number of articles by leading authorities on such topics as health, education, social work, housing, and employment. These are prefaced by a comprehensive statement setting forth the Committee's findings and recommendations in this area.

SIGNS OF THE HEALTH TIMES. National Health Council, 1790 Broadway, New York 19, N.Y., 1955. 64 pages. $1.00. A condensed report of the 35th Annual Meeting of the National Health Council. Included are papers on the effects of economic trends on health efforts, coming atomic developments, health recommendations of the Hoover Commission, and extending the horizons on health careers.

POSITION EVALUATION TECHNIQUES: *A Discussion and Appraisal.* Society for Personnel Administration, 5506 Connecticut Avenue, N.W., Washington 15, D.C. 1955. 28 pages. 50 cents. This pamphlet, prepared by a work group of the Society for Personnel Administration, presents an analysis and appraisal of evaluation techniques and practices, outlines various approaches to position evaluation, reviews the weaknesses and malpractices found in existing evaluation systems, and offers some conclusions and recommendations in this whole area.

PRE-SEVERANCE BENEFITS IN DEFERRED PROFIT SHARING. By J. J. Jehring. Profit Sharing Research Foundation, 1718 Sherman Avenue, Evanston, Ill., 1956. 89 pages. $3.00. A research study concerned with the extent to which loan and withdrawal provisions have been used by companies with profit-sharing plans, how effective the provisions are in practice, the nature of the provisions that have been used and the techniques that have been employed in their administration. The findings are based on returns from 265 companies, of whom 118 reported having either loan or withdrawal provisions, or both.

THE GIVE AND TAKE IN HOSPITALS: *A Study of Human Organization.* By Temple Burling *et al.* G. P. Putnam's Sons, New York, 1956. 355 pages. $4.75. A report of a study of personnel problems and attitudes in hospitals, conducted by the New York State School of Industrial and Labor Relations in cooperation with the Ameri-

can Hospital Association. The study encompassed six general, non-profit, privately managed community hospitals, and the observations covered all members of the hospital team.

HUMAN RELATIONS IN THE INDUSTRIAL SOUTHEAST: ***A Study of the Textile Industry.*** By Glenn Gilman. The University of North Carolina Press, Chapel Hill, N.C., 1956. 336 pages. $5.00. A comprehensive study of personnel practices in the cotton textile mills of the Southeast, which traces the impact of local, regional, and national influences on the pattern of human relations in the industry today.

TRAINING IN HUMAN RELATIONS. The Foundation for Research in Human Behavior, Ann Arbor, Mich., 1955. 25 pages. $1.00. This report summarizes the proceedings of three seminars concerned with the problems of human relations training. Four contrasting approaches—three company programs (International Harvester, Procter & Gamble, and Detroit Edison) and a laboratory training program—are described and appraised.

Publications Received

[Please order directly from publishers]

JOB EVALUATION—THE MODERN METHOD: ***To Establish a Sound Wage and Salary Structure; to Insure an Equitable and Effective Wage and Salary Administration.*** Business Research Corporation, 105 South La Salle Street, Chicago 3, Ill. 1956. Second Edition. 15 pages. Gratis.

PROCEEDINGS OF THE CONFERENCE ON CONSTRUCTIVE INDUSTRIAL RELATIONS. Edited by Rev. Mark J. Fitzgerald and John J. Broderick. Industrial Relations Committee, University of Notre Dame, Box 42, Notre Dame, Ind. 1955. 88 pages. $1.25.

SOME MONETARY ASPECTS OF WORKMEN'S COMPENSATION. By the Council on Industrial Health. American Medical Association, 535 North Dearborn Street, Chicago 10, Ill. 1955. 96 pages. $2.50.

THE EMPLOYER'S AND EMPLOYEE'S RESPONSIBILITY IN GOOD MANAGEMENT-LABOR RELATIONS: ***Panel discussion by Perrin D. McElroy and William Verity at Freedom Forum XVI.*** The National Education Program, 815 East Center Street, Searcy, Ark. 1955. 22 pages. 20 cents.

ADMINISTRATIVE INTELLIGENCE: ***Our Greatest Need For Good Success.*** By Thomas G. Spates. Published by California Institute of Technology, Industrial Relations Section, Pasadena, Calif. 1956. 20 pages. $1.00.

GUIDE TO FILMS IN HUMAN RELATIONS. Compiled and edited by Edward T. Schofield. Department of Audio-Visual Instruction, National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C. 1956. 96 pages. $1.00.

GUIDING PRINCIPLES AND PROCEDURES FOR INDUSTRIAL NURSES. Prepared by the Subcommittee on Revision of Standing Orders for Nurses in Industry of the Committee on Interprofessional Relations, Council on Industrial Health, American Medical Association. Copies available from The Council on Industrial Health, American Medical Association, 535 North Dearborn Street, Chicago 10, Ill. 1956. 34 pages. Single copies gratis.

A PRACTICAL GUIDE TO THE UNEMPLOYMENT INSURANCE PROGRAM FOR NEW YORK EMPLOYERS: ***A Blueprint of Action to Control***

Unemployment Insurance Costs. Commerce and Industry Association of New York, Inc., 99 Church Street, New York 7, N. Y. 1955. 35 pages. $1.00.

THE SKILLED WORK FORCE OF THE UNITED STATES. U.S. Department of Labor, 1955. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. 20 cents.

THE 1956 DIRECTORY OF OCCUPATIONAL SAFETY POSTERS. National Safety Council, 425 North Michigan Avenue, Chicago 11, Ill. 1955. 73 pages. 50 cents.

STATE MINIMUM-WAGE ORDER PROVISIONS AFFECTING WORKING CONDITIONS—JULY 1, 1942 TO JUNE 1, 1955. Women's Bureau Bulletin 259, U. S. Department of Labor, 1955. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. 81 pages. 45 cents.

UNEMPLOYMENT COMPENSATION: *A Graphic Review.* Research Council for Economic Security, 111 West Jackson Boulevard, Chicago 4, Ill. 1955. 56 pages. $1.00.

WAGES AND RELATED BENEFITS: *17 Labor Markets 1954-55.* Bureau of Labor Statistics, U.S. Department of Labor. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. 1955. 70 pages. 45 cents.

DON'T DO IT YOURSELF. By Julius E. Eitington. Society for Personnel Administration, 5506 Connecticut Avenue, N.W., Washington 15, D.C. 1955. 8 pages. 10 cents.

THE PROBLEM EMPLOYEE—AN ANSWER FOR MANAGEMENT. By Albert Kransdorf. Society for Personnel Administration, 5506 Connecticut Avenue, N.W., Washington 15, D.C. 1955. 14 pages. 20 cents.

COLLECTIVE BARGAINING IN THE NONFERROUS METALS INDUSTRY. By Vernon H. Jensen. Institute of Industrial Relations, University of California, Berkeley, Calif. 1955. 72 pages. 50 cents.

INJURY RATES IN NEW YORK STATE INDUSTRIES: *1954.* New York State Department of Labor, Division of Research and Statistics, 80 Centre Street, New York 13, N. Y. 1956. 76 pages. Gratis.

U. S. DEPARTMENT OF LABOR LIST OF CRITICAL OCCUPATIONS FOR SCREENING THE READY RESERVE. Bureau of Employment Security, U. S. Department of Labor, Washington 25, D.C. 1956. 28 pages. Gratis.

PERSONNEL MANAGEMENT IN HOTELS AND RESTAURANTS. By Donald E. Lundberg. William C. Brown Company, 915 Main Street, Dubuque, Iowa. 1955. 286 pages. $6.00.

OCCUPATIONAL PATTERNS OF OLDER WORKERS: *1940 and 1950.* New York State Department of Labor, Division of Research and Statistics, 80 Centre Street, New York 13, N. Y. 1955. 26 pages. Gratis.

LABOR MARKET AREAS FOR MANUFACTURING PLANTS IN WEST VIRGINIA. By James H. Thompson. Bureau of Business Research, College of Commerce, West Virginia University, Morgantown, W. Va. 1955. 28 pages.

HEALTH AND WELFARE BENEFITS NEW YORK STATE. New York State Department of Labor, Division of Research and Statistics, 80 Centre Street, New York 13, N. Y. 1955. 100 pages. Gratis.

Books on industrial relations which are of general management interest are regularly reviewed in THE MANAGEMENT REVIEW.

Readers' Forum

Plant Visits by Arbitrators: A Cautionary Note

To the Editors:

I was delighted to note that your March issue carried another article on arbitration. However, though Mr. Jordan made some good suggestions, he made one that might cause difficulty, and possibly you may want to call attention to it.

He suggests that arbitrators should visit the plant either before or after the hearing to apprise themselves of the situation. This advice should have been accompanied by the warning that such a visit should be made by agreement of both parties and that the arbitrator should be accompanied by a representative of each.

The courts have held that an arbitrator may not make any independent investigation without the consent of both parties and that the parties should be informed of what he has found so that they can submit any additional testimony to clarify or controvert what he learned from his visit.

Perhaps I may also suggest that one of these days you run an article on the very effective training work that is being done through the use of what we call the practice arbitration. Mr. Jordan refers to it on page 431 as "role-playing." At the American Arbitration Association, we do it through staging what is, in effect, a mock arbitration, based on an actual case in our files. The spectators are provided in advance with "briefs," outlining the opposing positions of the parties, and at the close of the proceedings are given the opportunity of expressing their opinions about the way the parties have used their material. We now have some 20 cases summarized, thus enabling the training group to select one best suited to its particular needs and problems.

J. NOBLE BRADEN
Executive Vice President
American Arbitration Association

Why Should Employee Publications Pay Off?

To the Editors:

I should like to question some of the underlying assumptions of Mr. Scholz' article, "How to Make Employee Publications Pay Off," in your March issue.

No other area of management endeavor has come in for so much abuse as the employee publication. By the giving of goals and of words it is assumed the goals are achieved by the words.

Yet few industrial editors would be willing to face the key question: "Would the employees buy your publication for so little as a nickel?" They hesitate to apply this criterion of reader interest because of the subject matter that management compels them to use.

Americans read to be entertained. When entertainment ceases they refuse to read. A corporation's high-minded ideals and long-range goals are simply not entertaining to many workers. So far as the company is concerned, their interest centers on their paycheck, their fellow workers, and whether the company can be expected to stay in business for a foreseeable future.

The role of civic leader, champion of management, extoller of private enterprise, or family counselor is outside the realm of the employee publica-

tion. All it is, and all it can ever be, is a cohesive force, whose function is to weld the company into some semblance of a unit. To assume that this end result must be a company of like-thinking workers is no more warranted than the assumption that all members of the same family must necessarily hold the same views.

The American worker is the most preached-to man in the world. If someone isn't after his paycheck it's his soul, and if it isn't his soul it's his spare time, or his way of thinking. When management steps into this field by assuming that it can encourage "right thinking" it is becoming a propagandist. By extolling a particular way of looking at the company's activities, management insinuates that the company is right. Any employee can tell management a hundred things that are wrong about the company and, if given the opportunity, he will.

When he is given the management story through an entertainment medium he simply ceases reading and the value of the company publication is lost. It does not seem to be fully realized that the employee publication enters the employee's home as a guest—in most cases, an uninvited one. No guest would be so presumptuous as to lecture his host on the merits of his company, what's wrong with unions, or right with them, the ethics of the profit motive, why he should participate in civic activity, or vote Republican, or on any other matter related to the host's private life and views.

On the other hand, even though uninvited, a guest who discusses matters of common interest is always welcome. Anything he has to say about new employees, the outside activities of other employees, the company's new plans, and other items of warm, personal interest creates a bond of kinship. In this way, a bond can be forged that is so strong that the employee takes real pride in his other "family."

When such a family unit has been created, the employee publication may indeed pay off in the form of increased production and lowered absenteeism. But to act before the bond has been formed is to assume familial ties which do not yet have any real basis for existence.

Management must always bear in mind that the employee publication is in direct competition with television, radio, and the magazines that are especially created to catch reader interest. These magazines spend thousands of dollars on make-up alone. No employee publication can compete with them in this respect. Therefore, its content is all-important—though good make-up can contribute to its over-all effectiveness. In other words, it must be slanted to items involving the reader personally. Unless you involve your reader, he isn't reading.

The employee publication, then, is a means to an end, and an indirect means at best. Its most important requisite is to be entertaining about the common "family." When this aim has been accomplished, other media must be used to carry management's message.

On the other hand, if trust has been established, the employee publication can be used—and used effectively—in a time of stress. In this respect, it represents one of the best forms of insurance management can buy—a bulwark against the day when its pages may demand a needed response. The uninvited guest can ask favors when in trouble, if he has proved himself a good friend and neighbor over the years.

WILLIAM W. MOSHER, Editor
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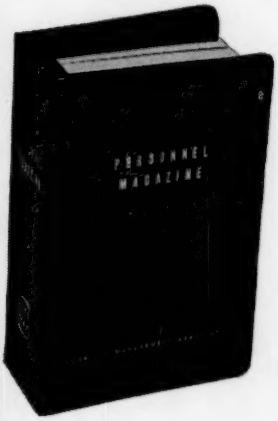

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